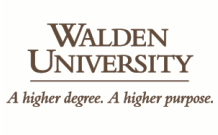

2020

Practitioners' Perceptions of Medical Compliance Among Homeless Clients with HIV and a Mental Health Diagnosis

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This is to certify that the doctoral dissertation by

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Walden University
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Abstract

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by

Kyle S. Berkley

MSW, Morgan State University, 2015

BSW, Sojourner Douglass College, 2013

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Human and Social Services

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May 2020

Abstract

Previous research on HIV medical adherence has focused on incentive-based interventions, while previous research with the chronically homeless has focused on substance abuse, mental illness, and health disparities. This qualitative study focused on the experiences and perceptions of medical providers in a metropolitan area who work on medical adherence with homeless people living with HIV and mental illness. Ecological systems theory provided foundation to explore how medical providers form interventions based on clients' ecosystems. The data were collected via audio-recorded, semi structured interviews with 15 case managers, mental health therapists, nurses, and primary care physicians who worked at outpatient medical centers. Data were transcribed using the Temi software and coded using Microsoft Excel. Data were analyzed by using Verbal Exchange Coding. Two themes emerged: interdependence and interpretations. Interdependence included the need for services, interpretation was based on the providers understanding of the need for client support. Participants saw the need for transportation as a barrier for homeless clients to keep medical appointments. They also saw the necessity for housing as a barrier for medication adherence and medication security due to stigmas. This study might benefit students completing college who plan to work in community healthcare clinics and with medical providers' continuing education endeavors. The study highlights the need for further education of medical providers within the context of the social policy and harm reduction model called Housing First.

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Dedication

This dissertation is dedicated to the loving memory of my father, Samuel Rogers Berkley. He was my inspiration and my role model. He will forever be loved and missed.

Acknowledgments

First and foremost, I would like to acknowledge, honor, and praise to my Lord and savior for evolving me from the person I once was to the man I am now. I would also extend my gratitude to my wife, Rebecca, and our three daughters, Savannah, Sage, and Shiloh. Special thank you to my family: My mother, Betty Berkley, and my sisters, Kyrissa, Kimberly, Toi, and Brenda, and my in-laws, Brenda and Samuel Moses. Thank you to my brothers Lamont, Angelo, Andre, Anthony, Bing, Durant, Myron, and Ritchie. I would like to acknowledge my Uncle John and Aunt Celestine, Uncle Charles and Aunt Brenda (RIH), Uncle Tom, Uncle Elisha and Aunt Evelyn, Aunt Jean and Uncle Robert (RIH), Aunt Edith, as well as my cousins Ronnie, Jamellah, John-Mark, Jenell, Charles, Kenny (RIH), Eri and Jeffery, and Charmeda. My Godmother, Stella Moore. I would also like to acknowledge my 3PM family, MSBC family, my West Port family (Sharay, Will, Chris (RIH), and Jamal), my R Dash family (Larry, Corey, Erin, Rasheed, Michael ,and Romel). I have a deep well of gratitude for the great faculty that worked at Sojourner Douglass College, Dr. Van Sluytman and the phenomenal Morgan State University School of Social Work along with Dr. Bold, Dr. Chenoweth, and the outstanding Walden University School of Human and Social Services Ph.D. program. If I forgot anyone, please charge it to my head and not my heart.

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Chapter 1: Introduction to the Study

Introduction

Individuals who face homelessness often experience challenges with receiving adequate health care. The homeless population includes individuals with mental and physical health needs. In this research study, I explored the experiences of medical providers who attempted to achieve medical adherence with homeless clients who have HIV and mental illness. I also explored how medical providers attempted to achieve medical adherence using the Housing First model. Housing First is a social policy and human service program that was designed to reduce hospitalizations among the homeless population, including substance abusers and those who are chronically ill, mentally ill, HIV-positive. Medical adherence refers to clients voluntarily engaging with medical providers, keeping appointments, and adhering to treatment plans. Both challenges and successful adherence will be identified as avenues for future research.

Background

The metropolitan area under study has a growing number of homeless people who are diagnosed with HIV and receive medical care at outpatient agencies, which includes 231 adults and adolescents recently diagnosed with HIV (Maryland Department of Health, 2018). Homeless people suffer from pneumonia, gastrointestinal disorders, cardiovascular disorders, mental illness, and suicidal ideation at a high rate compared to people who are housed (Kaduszkiewicz, Bonchon, Bussche, Hanamann-Wiest & Leeden, 2017). The metropolitan area's homeless population often present with mental health diagnoses, which can create barriers to treatment (Dufulio & Silverman, 2014).

Outpatient centers try to provide medical care for homeless patients, but face complications in providing a standard system of practice (Kaduszkiewicz et al., 2017).

Homeless youth have different experiences based on age, gender, and ethnicity (Manon, Krabbenborg, Boersma, Veld, Vollenbergh, & Wolf, 2016). The different experiences of homeless youth are attributed to their lack of psychosocial support, which influences their right to self-determination and personal well-being (Manon, Krabbenborg, Boersma, Veld, Vollenbergh & Wolf, 2016). Many homeless youth between the ages of 14 to 24, who suffer from mental illness, were found to have substance use history and lack of engagement with health care (Narerndorf et al., 2017). Many homeless African American youth suffer from serious mental illness, such as schizophrenia and bipolar disorder (Corrigan et al., 2016). African American youth, ages 15–20, experience hospitalizations and often die from health complications (Corrigan et al., 2016).

Housing First is a social policy and human service program, designed to reduce hospitalizations by providing long-term housing for the homeless (Kerman et al., 2018). Its application can benefit people with chronic illness, mental illness, HIV, and homelessness. The central premise of Housing First is that having safe and affordable housing is central to addressing the social and health issues experienced by homeless people (Kerman et al., 2018). For example, under this policy, people with current substance use disorders are not barred from accessing housing (Tsemberis, Gulcur & Nakae, 2014). This is particularly important, because alcoholism and mental health disorders have a high prevalence in the homeless population (Bermpohl, Krausz, Leucht,

Rossler, Schouler-Ocak, & Gutwinski, 2017). There are people without stable housing who require a high level of care due to HIV, but who also have mental health problems (Egbewale, Uthman, Odu, & Adekanmnbi, 2018). Clients who engage with outpatient medical facilities tend to have a good provider-client relationship and recover from their illnesses, such as; the flu, pneumonia, heart disease, or cancer (Stark et al., 2016). Egbwale and colleagues (2018) found that, for homeless clients who were housed, the Housing First model is associated with improved health care engagement.

Problem Statement

In Maryland, at least 7,144 people experience homelessness every night, including 2,230 families with children, 4,914 individuals, 574 veterans, and 267 unaccompanied youth (Bagley, 2018). In Baltimore, Maryland, at least 2,669 people experience homelessness each night (Lindamood, 2018). The homeless population [say where] includes African Americans, Latino Americans, women, members of the LGTBQ community, children, convicted felons, and people living with HIV and AIDS (Annelli, Barra & Salim, 2016).

Homeless people living on the streets, in emergency shelters, and in public spaces often have poor health, including pneumonia, drug-related intoxication and infections; 75% of homeless people were found to have current mental health disorders along with cardiac disease and respiratory illness (Kaduszkiewicz, Bohon, Bussche, Hansmam-Wiest & Leeden, 2017). African Americans are three times more likely to experience homelessness than European Americans and face limitations, such as a lack of available resources (Corrigan et al., 2017).

Professional health care providers, including case managers, substance abuse counselors, nurses, and primary care physicians, utilize many different interventions for homeless clients with HIV and mental health issues. Health and mental illness, such as bipolar disorder and schizophrenia, can also create challenges for provider outcomes, such as achieving treatment goals (Corrigan et al., 2017). The identified population in this study are homeless, diagnosed with HIV/AIDS receives medical treatment at outpatient centers in a metropolitan area. More than 12,000 people who are homeless receive substance abuse treatment, dental, medical, and vision care at a single outpatient medical center in Baltimore (Lindamood, 2017).

There is a gap in the literature on how providers perceive the challenges of medical adherence with people experiencing homelessness while living with HIV and mental illness. In particular, I found no research on how practitioners achieved medical adherence with homeless patients in an urban environment.

Purpose

The purpose of this study was to explore the experiences and perceptions of practitioners, identified as case managers, substance abuse counselors, nurses, and primary care physicians, who provide services for homeless clients with a dual diagnosis of HIV and mental health illness in a metropolitan area. The study used a generic qualitative approach to explore (a) perceptions of the effectiveness and limitations of interventions in relation to medication adherence, which included incentives, education, and harm reduction practices; (b) and practitioners' strategies for improving medical adherence with homeless clients.

Research Question

RQ: What are the perceptions of providers who attempt to achieve medical adherence from mentally ill and HIV-positive homeless clients in the metropolitan area?

Theory

I used ecological systems theory (EST) in this research to explore how providers perceive their interventions as being effective, based on the client's culture, health diagnosis, and social dynamics.

EST explores how family, peers, neighborhoods, cultures, and the economy may impact a person's decisions (Ellaway, Bates & Teunissen, 2017). Challenges with income, housing, and mental health could also fit in EST and inform how providers inform their decisions (Ellaway, Bates & Teunissen, 2017).. Systems management and response to change can allow medical providers to explore sustainability with clients and create effective ways to evoke change by exploring clients' resilience and adaptability traits (Ellaway, Bates & Teunissen, 2017).

In this research study, I explored the perceptions of medical providers in relation to their effectiveness in using interventions to achieve medical adherence with homeless? patients who are HIV-positive and have a mental health diagnosis. I used a generic qualitative research design for this study, which included behaviors and opinions collected through semistructured interviews with case managers, substance abuse counselors, nurses, and primary care physicians at an outpatient medical center.

In Chapter 2, l provide a substantial review of the EST. I explored interventions used by providers and how their decisions included a client's housing and economic challenges.

Nature of the Study

I selected a generic qualitative design to answer the research questions. I explored the perceptions, processes, and worldviews of participants who work with homeless, HIV-positive clients with mental illness? (Cooper & Endacott, 2007). In this research study, I identified the perceptions of the participants by using one-on-one interviews. The medical providers included medical case managers, nurses, patient advocates, primary case managers, and mental health therapists who provide services to homeless clients in the metropolitan area. The participants were solicited with a posting on Facebook medical provider groups and LinkedIn (see Appendix C). Participants were given (a) an invitation letter (see Appendix A) and (b) a consent form, which included the purpose of the study, the process of data collection, information on their rights as a participant—which they completed. The participants answered open-ended questions to explore background, training, interventions, and practice methods used and to identify themes and trends.

Definition of Terms

The following definitions were used throughout the research study.

Harm reduction: An intervention used to reduce harm to vulnerable populations, regardless of substance usage or psychiatric illness (Watson, Shuman, Kowalsky, Golembiewski & Brown, 2017).

HIV: The human immunodeficiency virus that weakens the immune system of people infected by destroying cells that fight diseases and infections (Center of Disease Control and Prevention, 2018).

Homelessness: Individuals and families living on the streets, in shelters, with friends/relatives, in vehicles, in abandoned buildings, in vacant homes, and having insignificant resources or any other non-permanent living situations (Health Resources & Service Administration, 2018).

Housing First: A social policy and human service program that is designed to reduce hospitalizations among the homeless population (Tsemberis, Gulcur, & Nalcat, 2014).

Medical adherence: The method that patients and medical providers use to obtain therapeutic results from agreed upon goals (Shafran-Tikia & Kluger, 2018). Medical adherence includes taking medication and adhering to a treatment plan with a provider to improve a client's quality of life and to reduce death (Bosworth & Zullig, 2017).

Medical providers: Case managers, substance abuse counselors, nurses, and primary care physicians.

Mental illness: A disorder of mood, perception or thinking that can impair behavior or judgement (Mohan & Math, 2019).

Uniform engagement: The delivery of care, done on a multidisciplinary level with health professionals. The uniformed engagement includes strategies, training, and practices conducted by the healthcare professionals (Corso, 2018).

Assumptions

This study was based on three assumptions. The first assumption was that different medical providers engage with the mentally ill and HIV-positive clients without a uniformed engagement practice, such as the harm reduction or Housing First models. Nonuniformed practice could yield different outcomes with patients or could create barriers to medical adherence. Academic training for health professionals can be critical for patient engagement at community and health care settings (Oestericher et al., 2017). Models such as harm reduction and Housing First have been found to help establish best care for treatment (Manski, 2018).

The second assumption was that the provider's training, education, and race impacts engagement with homeless patients. This assumption meant that training, education, or race could create barriers to client engagement and affect judgments when creating medical adherence goals with patients. African Americans make up a large majority of the homeless population, but face barriers with dentists, mental health providers, pharmacists, prescriptions, transportation, and undesired experiences with medical providers (Hirpa et al., 2016). Women represent 80% of homeless families in the United States and have higher rates of chronic illness and barriers to health screenings (Liveright, Berghella, & Brass, 2019).

The third assumption was that some providers take into account the homeless patient's limitations when expecting positive medical adherence. This means that providers make adjustments, such as providing clients with more scheduled visits or providing incentives to clients, to the goals and expectations for homeless clients that they might not make for housed clients. Models such as Housing First and Harm-

Reduction are designed to provide insight to medical providers about unpredictable outcomes (Sikstrom, 2018).

Scope and Delimitations

The scope of this study was limited to the experiences and perceptions of medical providers who had the goal of gaining medical adherence with homeless clients with HIV and mental illness. The participants were limited to medical providers at outpatient medical centers in the metropolitan area.

Limitations

Participant selection was a limitation to this study. Participants of this study included mental health therapists, registered nurses, primary care physicians and case managers. Practitioners, such as dentists, and specialty care practitioners, such as cardiologists, were not included in this study. The perspectives of providers that engage with homeless clients with cancer, or in need of dialysis were not explored in this study.

Significance of the Study

The research study sought to fill a gap in knowledge about how practitioners perceive interventions and adherence among homeless patients with the dual diagnosis of HIV and mental illness. The study was unique because it explored the practitioners' perceptions of successes and barriers they face in providing care to this population. The study provided practitioners' insights on common trends and challenges that homeless patients face and explore how practitioners navigate the barriers to achieve medical adherence.

Defulio and Silverman (2012) found there is a need for exploring the success of incentive-based treatment with substance abuse habits and HIV diagnoses. The study's results may have the following outcomes: (a) improve Housing First practice and training for current and future medical providers; (b) benefit outpatient centers by providing a standard of practice with providers who serve homeless clients and learning institutions in the human service field; benefit medical professionals with documented successful interventions used by other professionals; (c) provide educators in the human service field with a framework for preparing students to engage with homeless clients who have HIV and mental health diagnosis.

Summary

In this chapter I provided a summary and framework for this general qualitative research study. I defined terms that influence the scope of this study. This chapter identified some of the health challenges for people who are homeless and the challenges many homeless clients have had living with HIV and mental illness. The study was designed to fill gaps in the literature by exploring the perceptions of medical providers to gain effective practices and a description of some of the barriers they experience.

In chapter 2 I will provide a literature review of the Ecological Systems theory, along with an analysis of previous research that explored health challenges, mental illness and health disparities among the homeless population. Chapter 3 will provide insight to the method data was collected. Chapter 4 will provide the results from this research study. Chapter 5 will provide a discussion and conclusion for the research.

Chapter 2: Literature Review

Introduction

On a nightly basis, at least 553,742 experience homelessness nationwide, and 2,669 people experience homelessness nightly in Baltimore City (Lindamood, 2018). Heart disease, mental illness, and other chronic diseases have been found at higher rates among the homeless population (Kaduszkiewicz, Bohon, Bussche, Hausmam-Wiest, & Leeden, 2017). The homeless population has a growing rate of alcohol use and substance abuse, along with serious mental illness, such as bipolar disorder and schizophrenia (Manon et al., 2016). Interventions, such as incentive-based medical adherence to improve viral loads among HIV-positive patients, were found effective until the incentives stopped (Defulio & Silverman, 2014). Monitoring of opioids, physical activity, and ART therapy have been successful for improving medical adherence (Claborn et al., 2018).

In the literature review, I will explore health challenges with the homeless, mental illness among the homeless, HIV in the homeless community, and interventions used for adherence. In this literature review explore challenges with low income and homeless people, health disparities, challenges with accessing health care, and chronic disease among the homeless. I also explore how EST impacts the homeless and informs medical disorders. Limitations in the literature are identified throughout the review.

Literature Search Strategy

When I first began researching medical adherence with the mentally ill and HIV-positive homeless clients, I wanted to gain an understanding of various interventions used

by providers to engage homeless clients. My impression was that providers have used harm reduction, person-centered, and patient first interventions, along with incentive-based interventions for best care practices.

In the literature search, which covered the years 2014-2019, I use EBSCO, Embase, Google Scholar, and PubMed Sagemfor a cross-disciplinary search (mental health, nursing, and substance abuse) of qualitative and quantitative studies using the following keywords: *Housing First, HIV, mental illness, homelessness, Ecological Systems Theory, health disparities,* and *substance abuse*.

Ecological Systems Theory

EST describes a way for patients and providers to engage while focusing on the patient's health behaviors, and explore how providers navigate through the patient's ecosystem for desiable health outcomes (Head & Bute, 2018). EST is an evidence-based model that explores social, behavioral, and health support (Head & Bute, 2018). The ecological model is an evidence-based model that explores a patient's social system, including education, income, gender, age, race, family support, housing, and education level, in concert with a patient's treatment (Manski, 2018). Bronfenbrenner (1979) developed EST as a model based on people and how they live in various ecosystems, including employment, education, income, race, and housing. The ecological systems model can also be used by clinicians to assess risk and improve clinical judgement (Manski, 2018). Cardiologists from the United States and Canada found that implementing an ecological approach, exploring patients' limitations and

socioeconomic challenges, has improved clinical decision making and reduced healthcare costs (Manja, Gauyatt, You, Monterio & Jack, 2019).

EST explores how clinicians access risk with clients based on clients' social systems to apply clinical judgement for ideal outcomes (Bavanian et al., 2018). EST also identifies a client's personal risk, though assessment, by identifying basic problems, such as housing and income by applying clinical judgement (Bavanian et al., 2018). Social, ecological, and health problems interconnect with people, which requires the need for tailor-made services based on a person's social orientation, geographic region, income, and housing location (Oestericher et al., 2017).

Academic training for students and health professionals on how to navigate a patient in healthcare based on their social-economic challenges, could be critical in engagement (Oestericher et al., 2017). EST has been found to provide clinicians with risk assessments for patients because the gathered information helps clinicians to determine the best care options (Manski, 2018). Interpersonal communication, using the ecological model, can help influence medical decision making, such as understanding social influences, vaccinations, and treatment of diseases, such as HIV and cancer (Head & Bute, 2018). Illnesses, like HIV, often have attached social stigmas, and the ecological model provides health workers with the opportunity to understand kinship ties and insight into unpredictable outcomes, while making informed decisions (Sikstrom, 2018).

Health Challenges Among the Homeless Population

In a longitudinal study from 2000 until 2017, researchers found that people who are homeless, living on the streets, emergency shelters, and public spaces often have poor

health (Kaduszkiewicz, Bohon, Bussche, Hausmam-Wiest & Leeden, 2017). People who are homeless often suffer from mental illness, substance abuse, and experience significantly higher rates of morbidity (Corrigan, Kraus, Pickett, Schmidt, Stellon, Hantke, & Lara., 2017). People who had current mental health disorders, along with digestive, musculoskeletal, respiratory, chronic and cardiovascular disease make up 75% of the homeless population (Kaduszkiewicz et al., 2017). Kaduszkiewicz et al., highlighted that death-related intoxications made up to 25% of the homeless population sampled, pneumonia and other infections were identified as 17%.

Homelessness has a direct association with poor health outcomes, which has created higher mortality rates then the general population (Hirpa et al., 2016). People with serious mental illness have been found to die 25 years earlier than the general public (Weinstein, LaNout, Hurle, Sifri, & Myers, 2015). Homeless and low-income adults have experienced disproportionately higher rates of health problems, some in relation to poor living conditions, while having a lack of health insurance access (Hirpa et al., 2016). Homeless people have a higher risk of mental illness, such as bipolar disorder or schizophrenia (Corrigan et al., 2017). Homeless people have 25% higher rates of decayed teeth then the general public (Hsieh, 2016). Poor dental care has been identified as a risk factor for heart disease, health conditions, and cognitive disorders, such as depression (Hsieh, 2016).

Homelessness has been found to be a health crisis for Americans who have increased health needs, with high risk of hospitalizations, suicides, and relapse (Tinland et al., 2017). Homeless women have been found to be at-risk for medical non-adherence,

but also have a higher risk of depression, suicide, sexual and sexual assault in comparison to homeless men (Tinland et al., 2017). Homeless women have been found to have higher rates of schizophrenia, diabetes, obesity, and cervical cancer, but a low rate of mammography screenings (Weinstein et al., 2015). Weinstein and colleagues (2015) found that poor adherence may indicate the need for peer counseling, medical education ,and friendly service that can provide rapport with and support for homeless women.

Developmental and growth challenges have been found to impact homeless unaccompanied youth in the United States, based on the lack of housing, chronic illness and exposure to traumatic events. Annually, 1 in 30 children are homeless in the United States (Sandel et al., 2018). In a 12-month quantitative study, conducted in Baltimore, MD, Boston, MA, Little Rock, AK, Minneapolis, MN, and Philadelphia, PA, caregivers identified frequent hospitalizations and a lack of prenatal care among homeless pregnant teens (Sandel et al., 2018). During a qualitative study, from 2008 until 2015, in Massachusetts, pregnant homeless women were found to use the emergency room at a greater rate than outpatient medical centers designed to assist with pregnancies (Weinreb et al., 2019). Homeless women who are pregnant, also face higher risk for pregnancy complications, due to poor prenatal care, drugs and alcohol usage, along with mental health disorders (Clark et al., 2019).

A qualitative study, conducted for a year in Oakland, California, found that the homeless population, 50 years and older, experienced physical challenges that are intertwined with childhood trauma (Bazari et al., 2018). Physical symptoms and health challenges have been found to increase as result of anger, anxiety, and other difficulties

directly related to poor mental health among the homeless elderly (Bazari et al., 2018). Heart disease, cancer, and alcohol usage have been identified as the leading causes of death for homeless people 44 years and older (Roncarati et al., 2018). In a 9-year study, conducted in Boston, MA, elderly homeless men of color were found to have higher rates of death due to sexual risk-taking behaviors than homeless women or homeless elderly White men (Roncarti et al., 2018).

People who experience homelessness have a greater chance of being incarcerated due to the higher rates of mental illness and substance abuse (Walsh et al., 2019). Homeless adults have been found to have higher rates of cardiovascular diseases, cancers, and infectious diseases (Walsh et al., 2019). Airborne diseases, such as tuberculosis, infect homeless people at a high rate, but in a 9-month study, less than half of the population exposed and infect completed a full treatment (Nwana et al., 2019). Homeless adults, housed in a supportive housing in Los Angeles, have been found to have higher rates of poor health, mental illness, difficulty with daily living activities, and high rates of mobility problems (Henwood et al., 2019).

Mental Illness

Homeless people with a mental health diagnosis, such as depression and schizophrenia, often have poor health outcomes (Corrigan et al., 2017). Depression and schizophrenia were found, during a year-long quantitative study with 47 participants, as a common mental illness among homeless people (Corrigan et al., 2017). Women who had a history of schizophrenia were found to be less adherent to medical treatment than men

because of the negative side effects and perceptions towards psychotropic medication (Tinland et al., 2017).

The rate of mental illness is higher among the homeless population than the housed population. Bipolar disorder, schizophrenia and other mental illness have a higher prevalence rate among the homeless population (Maremmani, Bacciardi, Somers, Nikoo, Schutz, Fang, & Kruz, 2018). Homeless African-American males, along with homosexual males, were found to have high rates of HIV, anxiety and depression (Schnall et al., 2017). Co-occurring disorders among the homeless have been found to correlate with substance usage, and impact access healthcare (Begun et al., 2018). Social connections and self-efficacy have been found to be rarely explored among youth with mental illness (Begun et al., 2018). Homeless youth experience risk factors, such as physical and sexual abuse, that correlate to depressive disorders and substance abuse (Begun et al., 2018).

Homeless youth experience higher rates of substance abuse and mental illness in comparison to the adult homeless population (Narendorf, Cross, Maria, Swank & Bordnick, 2017). The prevalence of alcohol and marijuana usage decreased for youth who lived in shelters (Narendorf et al., 2017). Homeless people with mental illness, such as bipolar disorder and schizophrenia, are hospitalized more frequently than nonhomeless people for mental health reasons (Corrigan et al., 2017). Homeless people living with HIV experience food insecurity and depression (Palar et al., 2015). Having comorbid medical conditions can create a higher prevalence of mental health problems for people

experiencing homelessness, in addition to an increased need for crisis services and hospital visits (Kerman et al., 2018).

Health Disparities

Homeless people face health disparities, such as not being able to afford insurance, the lack of financial resources, low education levels, mental illness, and social stigmas in relation to medical problems (Hsieh, 2016). The Affordable Healthcare Act provided expansions to Medicaid that benefited the homeless by providing improved healthcare coverage and access (Hirpa, Iqbal, Ali, Ilyas, Kar, Splatt, Shortley, & Hardt, 2016). With an increase in medical care for low income and homeless people, building trust to increase health promotion created challenges (Hirpa et al., 2016). Homeless people experience high levels of trauma along with health challenges, which creates difficult barriers to engagement, including keeping appointments with physicians (Stafford & Wood, 2017). The physical and psychological well-being of the homeless population could also be a result of starvation-binge eating cycles, which increases the chances of chronic illness, such as heart disease (Hsieh, 2016). Challenges, such as prescriptions, child care, and lack of dental and vision care can add to health complications with homeless clients (Stafford & Wood, 2017).

The increase in health cost, since 2016, has created health and social issues (Stafford & Wood, 2017). Nationally, African Americans make up a large majority of the homeless population (Hirpa et al., 2016).The number of African Americans living in poverty is twice as high as the European American population (Corrigan et al., 2017). Homeless African American have experienced barriers with obtaining affordable

insurance to reduce the cost of dental, mental health, specialized care and prescription drugs (Hirpa et al., 2016). The need for healthcare improvements are needed for the homeless population because of the growing health challenges, such as; copayments, difficulty obtaining transportation and undesired experiences with medical providers (Hirpa et al., 2016).

Homeless women have been identified as the most vulnerable of the homeless population because of the possibility of having young children (Feldman, Craten, Enyart, Batchelor, Fniel, Dusza & Greenberg, 2016). Families and women represent 80% of the United States homeless population (Liveright, Berghella & Brass, 2019). Homeless women face higher rates of mental illness, substance abuse, chronic illness, and infectious disease (Liveright, Berghella & Brass, 2019). Women with serious mental illness have been identified with higher rates of homelessness and lower socioeconomic status, which creates barriers in health screenings (Weinstein et al., 2015). For example, health screenings for homeless women for cervical cancer have proven to be challenging for women who have substance abuse histories and mental illness (Wittenberg, Bharel, Saada, Santiago, Biges & Weinreb, 2015). Homeless women experience pregnancy at a younger age and higher rate, while typically lacking social support, income, or health insurance (Liveright, Berghella, & Brass, 2019). Homeless mothers have higher rates of poor prenatal care, lower education levels, and lower employment rates then homeless fathers (Cutts et al., 2015).

Homeless people, aged 50 and over, have unique barriers that hinder them from receiving adequate health care, such as the lack of housing, fresh food, and financial

constraints (Sudore et al., 2019). Homeless people face challenges with gaining access to palliative care due to barriers with substance abuse, access to health care, family, and social support (Klop, Veer, Dongen, Francke, Rietjen, & Onwuteake-Philipsen, 2018). Homeless veterans also experience inadequate palliative care due to an inability to maintain sobriety and challenges with the Veterans Administration collaborating with community providers (Hutt, Albright, & Dischinger, 2018). Homeless people experience unique challenges, such as poor access to healthcare, substance abuse, and the lack of financial resources when receiving end of life care (Stajduhar et al., 2019). In a 30-month qualitative study, Stajduhar and colleagues (2019) found that the lack of service providers, social support, lack of education towards medical care, and the lack of safety management have created challenges for palliative care.

During a 24-month quantitative study in Massachusetts, homeless families who utilized shelters were found to have utilized emergency rooms at a higher rate (Clark, Weinreb, Flahive, & Seifert, 2018). Homeless people in Massachusetts were also documented as having higher rates of substance abuse, depression, and anxiety among pregnant women and children (Clark et al., 2018). Prescription drugs, physician services, mental health and substance abuse treatment has been found to be the leading cost among families that use Medicaid services during a 3-year quantitative study (Parkern, Cima, Brown, & Regier, 2018). In a 2018 study in Vancouver, using the Housing First Program, homeless people that did not receive a follow-up after discharge from the hospital experienced rehospitalization within 12 months (Currie, Patterson, Moniruzzaman, McCandless, & Somers, 2018). Homeless patients who are admitted into the hospital

have a higher rate of readmission within 30 days (Dirmyer, 2016). Homeless people who did not receive a follow-up after a discharge experience rehospitalization 56% more often than individuals that did receive follow-ups (Currie et al., 2018). During a 3-year population-based quantitative study, homeless people were more likely to be readmitted into a hospital within 30 days due to the lack of follow-up and postdischarge care (Lalibarte, Stergiopoulos, Jacob, & Kurdyak, 2019).

HIV Treatment

Baltimore City has 518,161 people who are diagnosed with HIV that are 13 years or older (Maryland Department of Health, 2017). Low income, racial minorities, gay-lesbian-bisexual-transgender are the most common groups of people that were infected with HIV (Teti, Koegler, Conserve, Handler & Bedfond, 2018). Homeless people with HIV have been found to have poor survival rates due to the access of services, healthcare and risky behaviors (Khanijow, Hirozawa, Anacock, Asu, Bamberger, & Schzarcz, 2015).

People living with HIV over the age of 50 have been found to have multi-morbidity with substance abuse and chronic pain (Sangarlangkarn & Appelbaum, 2016). Using a quantitative study at an outpatient medical facility, lower confidence and lack of sleep were found by patients with high levels of pain (Merlin et al., 2014). In correlation to pain among HIV-positive people, 50 years and older, the sociological model explores the gaps with the individual, in conjunction with social, political and biological dimensions of health (King & Winchester, 2018). Lived experiences, economic

challenges, and demographics could create unsustainable practices if not explored by providers (King & Winchester, 2018).

Interventions to reduce health cost and provide preventive interventions require an ecological model (Kaerbis et al., 2019). Defulio and Silverman (2014) found that incentive-based medical adherence programs are effective with HIV medical adherence, alcohol dependence, and tuberculosis treatment. There are no documented studies on long-term effects from interventions with viral loads among HIV-positive adults with a substance abuse history (Dufulio & Silverman, 2014). Supervised physical activities as interventions for people living with HIV have better results than unsupervised activities (Cho, Iribarren, & Schnall, 2017). Physical activities were found to be an effective intervention, for people living with HIV, that improved cardiovascular, strength, flexibility and balance (Cho et al., 2017). Kaduszkiewicz et al. (2017) found that providing access to specialist, therapists, and dentist improved health results for the homeless.

Interventions used with the Homeless Who Are HIV-Positive

Treating HIV for people without stable housing is challenging. Antiviral medication and antiviral treatments require support for medication, such as pre-exposure prophylaxis (PrEP), from medical providers to obtain adherence (World Health Organization, 2015). Interventions, like PrEP, have received the lowest level of support from disease intervention specialists because of the possibility that resistant strains could spread due to low adherence and irresponsible sexual activity (Bagchi & Holzemer, 2018).

Individuals actively engaging with substance abuse take less than 80% of their prescribed antiviral dosage (Defulio & Silverman., 2014). Incentive-based approaches, such as providing clients with gift cards for keeping appointments, have been found to improve adherence, but not for long term engagement (Dufulio & Silverman., 2014). One possible issue with adherence is having stable housing. Homeless people diagnosed with HIV have been found to reduce numbers of HIV/AIDS-related deaths after receiving housing (Khanijow et al., 2015). Engagement from medical professionals, such as follow-ups, medical education, home visits, and providing transportation to appointments, has been found to improve long-term adherence (Voigt, Cho & Schnall, 2018). Harm reduction approaches, such as prescribing opioids as an incentive for medical adherence, have been used by clinicians, but have received criticism for potential harm and negative effects on vulnerable populations (Claborn et al., 2018).

There are provider-based interventions that have improved medical adherence for the homeless populations. During a 1-year quantitative study in New York City conducted with 209 HIV-positive patients and medical providers, physical activity, along with long-term ART treatment, was found to improve health benefits (Cho et al., 2017). Physical activity and long-term ART treatment were also found to mitigate the effects from cardiovascular disease and to improve skeletal muscle functions for people living with HIV (Cho et al., 2017). A qualitative study in Massachusetts, with HIV-positive patients and medical providers, found that the prescription monitoring of opioids has been found to improve attendance with homeless patients with HIV and substance abuse histories (Claborn et al., 2018). Providing access to specialist, therapists, and dentist also

improved health results for the homeless (Kaduszkiewicz et al., 2017). A qualitative study conducted in Colorado and South California outpatient medical centers found that patient education and improved patient contact with HIV-positive patients lowered cost by obtaining treatment retention (Claborn et al., 2018). Incentive-based medical adherence has been found to be effective with HIV medical adherence, but high-quality evaluations to explore the effectiveness of interventions are needed to explore what interventions are most effective (Defulio & Silverman, 2014). However, many participants of incentive programs fail to maintain medical adherence (Defulio & Silverman, 2014).

Nonmedical interventions are also part of providers' arsenal of interventions. Aerobics, meditation, and yoga were found to improve health functions for people living with HIV and mental illness (Cho et al., 2017). Supervised aerobics and physical resistance training were found to be the most effective intervention for adults living with HIV (Cho et al., 2017). Clinical improvements were found from HIV-positive people with kidney failure, diabetes, obesity and heart failure that participated in supervised physical activity (Cho et al., 2017).

Harm Reduction

Harm reduction is an intervention used to reduce harm to vulnerable populations, regardless of substance usage or psychiatric illness (Watson, Shuman, Kowalsky, Golembiewski & Brown, 2017). Harm reduction is an evidence-based practice used to prevent human and public health inequalities in relation to substance use in social, economic, and cultural settings (Harm Reduction International, 2019). Harm reduction

addresses discrimination while providing cost-effective interventions for health care (Harm Reduction Interventions, 2019). Housing First is a social policy and human service program used in the United States and Canada, but 18 out of 39 Housing First programs in North America fail to implement harm reduction strategies (Watson et al., 2017).

People who engage in intravenous drug usage and needle sharing and men who have sex with men have been found to be a considerable risk for HIV infection (Gogia, Lawlor, Shengelia, Streela & Raymond, 2019). Harm reduction programs, such as safe sex education, overdose prevention materials, and needle exchange services have been implemented to reduce the rates of HIV infections and overdoses (Gogia et al., 2019). Syringe sharing was found to have decreased with the introduction of harm reduction interventions, while sexual risky behaviors increased (Gogia et al., 2019). Marginalized people, such as people of color, substance users and the homeless are target populations for the harm reduction model, due to poor access to health services and poor health outcomes (Watson et al., 2017).

Harm reduction interventions have been found to improve services for people with alcohol and opioid addiction (Collins et al., 2014). Harm reduction interventions have been found to reduce barriers with the homeless HIV population, specifically when counselors and case managers use a trauma-informed approach (Watson, Shuman, Kowalsky, Golembiewski, & Brown, 2017). Interventions, such as motivational interviewing, have been found to promote harm reduction (Watson et al., 2017). In a cross-sectional study in Georgia, harm reduction interventions were found to have

reduced risky behaviors and to increase HIV knowledge with at-risk populations (Gogia et al., 2019).

Housing First

Housing First programs are an additional, nonmedical intervention for the homeless and mentally ill. Their focus is on assisting homeless individuals to obtain and maintain independent housing without the detriment of losing services for substance abuse or behaviors attributed to mental illness (Tsemberis, Gulcur, & Nalcat, 2014). The Housing First model is designed to reduce homelessness, by providing social policy and a human service program that will decrease hospitalization (Tsemberis et al., 2014; Durbin et al., 2018). Housing First is an effective social and economic intervention. The implementation of Housing First programs has reduced emergency room visits and the burden of institutional services in areas served (Kerman et al., 2018). The Housing First policy has also decreased the economic cost of medical and mental health services for homeless people that has been priced at an average of $40,000 annually per person (Collins et al, 2019).

The Housing First model was found to be effective with homeless substance abusers (Tsemberis et al., 2014). Housing clients without sober limitations did not increase alcohol and substance usage, but individuals with a dual diagnosis of mental illness and substance use have a greater need of care with service providers (Tsemberis et al., 2014). The Housing First Program has also provided productive interventions for homeless people with intellectual deficits by providing harm reduction interventions,

such as; case management, counseling and supportive housing services(Durbin et al., 2018).

Supportive housing is needed on a day-to-day basis along with problem-solving approaches to help homeless veterans retain or obtain housing (Gabriellan et al., 2018). A study conducted in the Greater Los Angeles Veterans Administration Supportive Housing program found that problem-solving services are needed for homeless people with serious mental illness (Gabriellan et al., 2018). Homeless African Americans were found to have a greater risk for mental illness because of the lack of support for chronic disorders, such as HIV, family support, and health providers (Corrigan et al., 2017). Homeless people with mental illness have a reduced number of hospital visits, shelters, service systems, and outpatient services when engaging with the Housing First Initiative, but homeless minorities may not be reflected in the results (Kerman et al., 2018).

Housing First has faced a number of challenges with serving homeless families, which includes women and children fleeing domestic violence and abuse (Collins et al., 2019). Homeless families account for up to 35% of the United States's homeless population (Henry et al., 2016). Homeless children have high rates of learning disabilities and chronic illness (Collins et al., 2019). Homeless children have higher rates of cognitive delays than nonhomeless children that have been placed in housing (Durbin et al., 2018).

The Housing First intervention has faced challenges with providing long-term housing to chronically homeless people in a timely manner (Bullen & Baldry, 2018). Delayed access to housing can increase challenges to mental and physical health care,

which could be problematic for homeless families and individuals with chronic illness (Kaduszkiewicz et al., 2017). Housing First has also faced challenges with staff turnover and burnout in agencies, which have caused barriers to treatment for clients with mental health and substance abuse histories (Watson et al., 2018). Housing First provides a cost-cutting social policy for medical adherence, but creates a deserving population among the homeless, due to its qualifications, and is not available for the general homeless population (Stafford & Wood, 2017). Housing First promotes health, recovery and well-being by reducing chronic homelessnes and providing access to housing to reduce hospitalizations (Parkinson & Parsell, 2018). Housing First administers service plans and goals along with therapeutic interventions to reduce hospitalizations and chronic homelessness (Parkinson & Parsell, 2018).

Summary

Existing research that identifies the experiences and perceptions of medical providers who work with homeless individuals diagnosed with mental illness and HIV is limited. The research with the successful or unsuccessful interventions used with the HIV and mentally ill homeless population is nonexistent. The goal of this study was to increase the understanding of interventions used by medical providers and to identify barriers they have faced in engaging mentally ill and HIV-positive homeless patients. Research studies have been limited towards providing insight to providers about the homeless with mental illness and HIV. Research is also limited on the effectiveness of the EST model among the mentally ill and HIV-positive homeless population.

In this chapter, I identified higher rates of mental illness, substance abuse and morbidity among the homeless in comparison to non-homeless people (Corrigan et al., 2017). Homeless people experience poor health outcomes and have higher mortality rates then the general population (Hirpa., 2016). The lack of health insurance access has created higher rates of health problems for homeless adults (Hirpa., 2016). In addition to the lack of insurance, homeless people have greater risk of hospitalizations, heart disease and cognitive disorders (Hsieh, 2016).

Mental health illness, such as bipolar, depression and schizophrenia has been found to be highly prevalent among homeless people (Maremmani, Bacciardi, Somers, Nikoo, Schutz, Fang & Kruz, 2018). Homeless people with schizophrenia and depression were found to have poor health outcomes (Corrigan et al., 2017). Homeless youth experienced higher rates of substance abuse and mental illness in comparison to homeless adults (Nerendoff et al., 2017). Risk factors, such as physical and sexual abuse have also been found to be prevelent among homeless youth (Begun et al.,).

In this chapter, I provided a brief overview of health challenges, mental illness, interventions used, health disparities, challenges to health care, and HIV treatment with the homeless population. This chapter also provided a brief overview of the housing first, harm reduction and ecological systems models of practice. The EST was the framework used in this study, which aligns with the topics explored in this chapter. A generic qualitative study, using an EST, allowed me to explore the experiences of providers and their perceptions of limitations and strengths to their interventions.

Chapter 3: Research Method

Introduction

In this generic qualitative study, I explored the perceptions of medical providers, at outpatient medical centers in a northeastern metropolitan area of the United States, who provide services to the homeless population. The research question explored their perceptions about the effectiveness of interventions used to help mentally ill and HIV-positive homeless patients seek and receive treatment.

In this chapter, I outline the generic qualitative study methodology I used. It covers the sample procedures, role of the researcher, participant selection, instrumentation, procedure for recruitment, sample size, data collection, field notes, and trustworthiness, provided ethical considerations, potential biases, and the role of researcher.

Sampling Procedures

In this study I used a generic qualitative design, which allowed me to explore the perspectives, processes, and worldviews of people involved in providing care to homeless, HIV-positive and mentally ill clients (Cooper & Endacott, 2007). I was the primary data collection instrument, by audio recording face-to-face interviews, coding, and analyzing data gathered from the participants. In this study, I asked participants open-ended questions to gain a better understanding of their perspectives and experiences in working with this population.

The case study methodology explores and explains an individual, organization, or event, which does not address the purpose of my study (Sauro, 2015). The grounded

theory also did not solve the need of this study, because grounded theory studies often have larger sample sizes, along with building a theory around existing data and interviews (Sauro, 2015). In my study, I explored the perceptions of medical providers with the use of open-ended questions and utilize a sample size of 15 participants.

The phenomenological approach did not appear to be appropriate for this study, because the phenomenological approach utilizes videos, reading documents, and conducting interviews, and my study focused primarily on open-ended questions with participants (Sauro, 2015).

The ethnographic methodology was very similar to the methodology I chose, because it allows the researcher to interact with the participant in their environment (Weston, 2019). The reason I did not choose ethnography was that it primarily focused on the observations of the participant and not as much on their experiences.

The generic qualitative research method allowed me to explore the perceptions and experiences of the medical providers, by asking open-ended questions. The generic qualitative design is a successful framework when exploring a stochastic system, such as medical providers in the metropolitan area (Bertrand, Bouyer, Brihaye, & Carlier. 2018). The generic qualitative model allowed me to analyze the data using open-ended questions with medical providers, while remaining abstract to preserve positive probabilities (Bouyer et al., 2018). This provides me the opportunity to explore experiences and beliefs, such as the medical providers experiences and perceptions, as they attempt to achieve medical adherence with the homeless (Kennedy, 2016).

The Role of Researcher

The role of the researcher in this study was to collect and analyze data (Camacho, 2016). In this study, I was the primary data collection instrument, by audio recording face-to-face interviews, coding, and analyzing data gathered from the participants. As the primary researcher, my objectives were to remain non-judgmental and to identify patterns and trends from the participants' interviews (Clark & Veale, 2018). My study utilized open-ended questions from participants to gain an understanding of medical providers' perspectives and experiences. The exploration into the perspectives and experiences reduced any personal bias, while gaining an understanding of the medical provider's insight (Clark & Veale, 2018).

In my research study, I took on a participatory role, with the goal of collecting and analyzing data (Clark & Veale, 2018). In my research, I acknowledged bias, assumptions, and values that could potentially affect the data collected (Clark & Veale, 2018). This was useful in eliminating countertransference, in reducing barriers during the interviews, and in analyzing data (Camacho, 2016). My interview used open-ended questions to gather data and identify themes.

Methodology

For this study, I chose purposeful sampling with the goal of interviewing medical providers, including case managers, substance abuse counselors, nurses, and primary care physicians. . The participants in my study were solicited through social media platforms, such as Facebook and LinkedIn. The participants solicited through Facebook responded to a post inside of medical provider forums, after I received permission to post. Participants solicited from LinkedIn were solicited from responding to my public post.

The providers on Facebook and LinkedIn responded to the post found in Appendix C, and received an invitation e-mail, found in Appendix A.

Participant Selection

The participants in this study were medical providers who engage with homeless clients diagnosed with mental illness and HIV. The medical providers included case managers, substance abuse counselors, nurses, and primary care physicians who provided medical services to homeless clients in the metropolitan area. The participants were provided with an invitation letter, found in Appendix A. The participants were provided informed consent, which included the purpose of the study, the process of data collection, and their rights as a participant. The participants answered open-ended questions to further explore their background, training, interventions, and practice methods used. The open-ended questions, found in Appendix B, helped to identify themes and trends.

Instrumentation

In my generic qualitative study, I used one-on-one audio-recorded interviews with medical providers. The interviews were use semistructured, open-ended interview questions, which provided in-depth perspectives of the participants. The research questions were developed based on the gaps identified in the literature, which include the perceptions of the medical providers who work with mentally ill and HIV-positive homeless patients. The qualitative interviews ranged from 30–60 minutes.

Procedure for Recruitment

For my study, I used a purposeful sampling design, which provides researchers with evidence and rich information from participants (Benoot, Hannes, & Bilsen, 2016).

Participants of this study were solicited from social media outlets, such as Facebook and LinkedIn. Participants on Facebook were solicited from groups or forums that were designed for medical providers. Participants from Linkedin responded to a public post. The post on both social media outlet can be found in Appendix C. Participants that responded to the post were provided an invitation letter, though e-mail, found in Appendix A. Participants met the criteria of being a medical provider at a metropolitan area outpatient facility. The medical providers for this study were identified as case managers, substance abuse counselors, nurses, and primary care physicians.

The internet has been used as a method of recruitment and data transmission since 1995 (Gupta, 2017). Social media platforms, such as Facebook, Twitter and LinkedIn can be used to recruit participants, and collect data (Gupta, 2017). Social media platforms, such as Facebook and LinkedIn create challenges for ethical guidelines, because of digital trace data, such as blogs, and individuals in community forums (Sungiuna, Wiles & Pope, 2017). Ethics in research must include the protection of human rights, dignity, and safety of the participant (Sungiura, Wiles & Pope, 2017). Obtaining permission from forum moderators, and not causing debates will provide good ethical practice and protect human rights (Sungiura, Wiles & Pope, 2017).

Sample Size

This study had approximately 15 participants that engage with homeless clients who are HIV-positive and mentally ill in order to gain insight from multiple provider types. The 15 participants met the criteria of case managers, substance abuse counselors, nurses, and primary care physicians who have worked with the target population. The

participants were practitioners from one of the three identified outpatient medical facilities that service the homeless in the metropolitan area. The 15 participants for this study were used to gain saturation for the study. Saturation is the point where the researcher stops collecting data because no new insights have been found in identified themes (Nelson, 2017).

Data Collection

Data was collected by audio-recorded interviews, then transcribed and coded using Transana (2019). Transana is a tool designed to help import audio, transcribe, code and provide tools for sophisticated reports, such as graphs. I personally transcribed the collected data. Transana (2019) provides a transcription service for individuals who utilize the software. Participants of the study were provided with a transcribed copy of their interview, 4–6 weeks after the interview. Data was collected from face-to-face interviews conducted at the metropolitan area library and an office inside of an outpatient medical facility. Participants were asked open-ended interview questions, found in Appendix B, with the goal to identify themes related to interventions providers used with clients, barriers they have faced in treatment, and possible systemic or social impacts that may affect treatment.

In my qualitative research study, I explored the perceptions of medical providers, from multiple disciplines that provide medical services for HIV-positive and homeless patients (Jordan, 2018). Participants for my research study were given informed consent prior to the audio recorded interviews. The study provided clarification probes, not with the goal to lead the participant, but rather to gain rich data from their perceptions

(Maxwell, 2018). Clarification probes are beneficial to gain a stronger perspective of what statements and influences from participants need clarification and can be used to build rapport during the interview (Maxwell, 2018).

Analysis

Data was analyzed based on categories of provider experiences, interventions used, barriers experienced, use of informed decision-making, and perceived trends encountered. Data from the study was analyzed by answers provided during the interviews. The themes were analyzed and sorted based on phrases, answers, and trends from different participants (Clark & Veale, 2018). Data was also coded based on the site of the participant and their role. Data analysis also identified what limitations providers found working with clients due to social and economic limitations.

The data collected was analyzed based on themes related to harm reduction and Housing First models, identified in Chapter 2. The themes identified explored the perceptions and experiences of medical providers utilizing Housing First or harm reduction interventions. The themes also identified the participants' identified strengths and limitations with working with working with the identified population. The first four interview questions, provided in Appendix B, explored education, training, and job role of the participant. The last twelve interview questions explored the medical provider's perceptions working with the homeless population.

In my research study, I utilized open-ended questions with the goal of identifying categories, mapping relationships, and setting exclusion criteria. In this research, I identified categories based on the responses of the participants (Vaughn & Turner, 2016).

I mapped responses by conceptualizing themes between responses from other participants (Vaughn & Turner, 2016). Exclusion criteria was set by the identification of useful data gathered in this study.

In this study I used a verbal exchange coding method, which transcribes verbatim from conversations and explores key moments, while highlighting the interpretations from the provider (Saldana, 2016). In this study I analyzed the interpretation and the interdependence from medical providers. The interpretations were analyzed based on how providers' interpreted limitations and strengths from clients based on income, substance abuse, and homelessness. The interdependence was analyzed based on how providers utilize different parts of their client's social systems to gain medical adherence. The social systems were identified as housing, employment, income, family and transportation.

Field Notes

Field notes were stored using the Microsoft Excel. The Temi software was beneficial for identifying themes, such as how providers engage with homeless people with health disparities and how they build trust (Hirpa et al., 2016). The field notes were used to note how providers utilize the Housing First model to improve patient contact. Field notes were used to identify both themes and limitations during the course of interviews. The field notes gathered were categorized and explored in the results and discussion portion of this study. The field notes will be stored for 5 years in a file cabinet and then properly disposed and shredded. The field notes will be destroyed following the protocol from the Institutional Review Board's guidelines.

Trustworthiness

Trustworthiness is achieved with credibility, transferability, dependability, and confirmability in a study (Korstjens & Moser, 2017). Credibility is defined by how accurate and truthful are the research findings (Korstjens & Moser, 2017). Transferability is defined as how applicable are the findings, and if the results can be applicable to other contexts, such as other populations or phenomena (Korstjens & Moser, 2017). Dependability is defined as the ability to make the data reliable, and if the study can be repeated with consistent results (Korstjens & Moser, 2017). Confirmability explores if bias or personal motivations affect the findings or the results (Korstjens & Moser, 2017). Credibility was gained by addressing and identifying research participants' views and individualities in the study. Transferability was provided by identifying different providers, establishing their roles, and exploring their perceptions working with the homeless. Data collected in this study could show general trends with other urban outpatient medical centers, because interviews were conducted with providers from different medical centers in the metropolitan area.

To avoid unreliable research, I thoroughly analyzed data collected to provide truthful findings that are shaped by the participant's experiences and perceptions (Amankwaa, 2016). The study's participants consisted of medical providers from three different outpatient medical centers in the metropolitan area to convey perception authenticity (Connelly, 2016). The study provided a detailed and transparent picture of the participants, which includes their perceptions to reduce generalizability and bias (Cope, 2014). I utilized semi-structured interviews that include open-ended interview

questions to further explore possible changes in a participant's behavior (Goodell, Stage & Cooke, 2016).

Credibility

Credibility is achieved when the researcher discuss negative cases, using peer debriefs and utilizing external auditors (Korstjens & Moser, 2017). In this study, I achieved credibility by using the genetic qualitative research model to explore providers perspectives and seek to understand inseparable finings (Korstjens & Moser, 2017). Credibility was also reached by following up with the Dissertation Chair regarding negative cases, and further exploring and identifying what limitations may have caused the negative case. My research included a review by my Dissertation Committee, which help provide insight and correction with limitations and gaps not previously identified in my study.

To ensure the trust with participants, IRB, and myself, participants were provided a transcribed copy of their interview (Mills, 2018). The goal of the study was to explore the perceptions and experiences of medical providers, but all information gathered were documented and explored to rule out assumptions (Mills, 2018). Ruling out assumptions benefitted the study by exploring emotions, responses, and body movements to ensure that rational or assumptions are not limited from the participant’s perspectives (Longholer & Floersch, 2013).

Transferability

Transferability was reached by providing descriptive and true details to ensure that the research can be reproduced (Korstjens & Moser, 2017). I attempted to obtain

transferability by conducting audio recorded interviews with medical providers at 3 outpatient medical centers in an urban area of Maryland. I recruited 15 participants, to ensure saturation, and to provide transferable data in future studies by using rich detailed data (Connelly, 2016). The study provided information on participants' perceptions, roles, and education levels (Cope, 2014).

Dependability

Dependability was reached by ensuring that the study's research question is aligned with the data collected and that the methods used were appropriate for the study (Korstjens & Moser, 2017). I identified the experiences of providers, interventions used, identified barriers, how providers used informed decisions based on client's socioeconomic well-being, and perceived trends that providers encountered with the clients.

Confirmability

Confirmability was reached when the researcher did not have an bias in the study (Korstjens & Moser, 2017). I created an unbiased study by exploring the perspectives of case managers, substance abuse counselors, nurses, and primary care physicians. In this study, I refrained from using any form of discrimination or prejudice while interviewing any qualifying candidate that desires to participate. If any possible concerns of prejudice or discrimination arose, I refer back to the Dissertation Chair and followed the IRB's ethical guidelines.

Ethical Considerations

The proposed study required approval from the Institutional Review Board (IRB) because the research requires human participants. The IRB application was completed during the University Research Review proposal review. The participants were not approached or interviewed before IRB approval. The IRB approval number was 12-24-19-0745883. All participants for my research study were at least 18 years of age or older. The participants of this study worked in the medical field at outpatient medical centers in the metropolitan area. While providing education of rights and giving the participants informed consent I inform participants of guidelines, risks, and benefits from participating in this research study, along with their rights (Gambril, 2015). Participants in this study could withdraw at any time, for any reason, before or after giving consent. My research study was not involve any harm to any participants. All participants of this research study were voluntarily sign an informed consent form, which explains the study's procedure.

Summary

The great need for understanding the experiences and perceptions of medical providers who work with the mentally ill and HIV homeless population was identified in Chapter 2. In Chapter 3, I identified the procedure used to answer the research question: What are the experiences and perceptions of medical providers who attempt to gain medical adherence from the mentally ill and HIV-positive homeless people in the metropolitan area? The study used a generic qualitative design, which explored the perspectives and process of medical providers. The study followed an ecological systems model, which explored how providers inform their decisions based on the clients'

income, race, housing, and educational limitations to achieve desired outcomes. The study's sample size was approximately 15 participants, which included case managers, substance abuse counselors, nurses and primary case managers. The interviews consisted of face-to-face audio recorded interviews, transcribed using the Temi Software and coded using Microsoft Excel.

In Chapter 4, I will provide results from the data analysis.

Chapter 4: Results

Introduction

The purpose of this study was to explore the experiences and perceptions of medical providers who worked with homeless clients with a dual diagnosis of HIV and mental health illness in a metropolitan area in the northeastern United States. This chapter will provide the results of the study and include the following topics: setting, demographics, data collection, data analysis, and evidence of trustworthiness.

Setting

Face-to-face interviews took place at a local branch library and an office.

Demographics

The 15 participants, who were recruited from four medical outpatient facilities in a metropolitan area, included six African Americans, six Whites, one biracial American, one Asian American, and one Latin American. There were 3 males and 12 females. Seven were case managers, four were registered nurses, three were nurse practitioners, and one was a mental health therapist.

Table 1

Demographics

Participant	Education	Occupation	Sex	Ethnicity
P1	Bachelor's Degree	Registered Nurse	Female	African American
P2	Master's Degree	Therapist	Female	White
P3	Doctoral Degree	Nurse Practitioner	Female	White
P4	Associates Degree	Case Manager	Male	African American
P5	Master's Degree	Registered Nurse	Female	White
P6	Master's Degree	Case Manager	Female	White
P7	Master's Degree	Registered Nurse	Female	White
P8	Master's Degree	Nurse Practitioner	Male	African American

P9	High School Diploma	Case Manager	Female	Latino American
P10	Master's Degree	Nurse Practitioner	Female	Biracial American
P11	Associates Degree	Registered Nurse	Female	African American
P12	Master's Degree	Case Manager	Female	White
P13	Bachelor's Degree	Case Manager	Female	Asian American
P14	High School Diploma	Case Manager	Male	African American
P15	Master's Degree	Case Manager	Female	African American

The participants were sent an e-mail to confirm their eligibility and to schedule a face-to-face interview. The informed consent process began once participants arrived at the library or secured office space. Participants were first educated about the study; they then signed the consent form and were given a copy. Field and reflective notes were taken during and after each interview. Data were collected via semi structured interviews. Demographic information was gathered through the course of the interview. I digitally recorded each of the 15 participants, which ranged between 30 and 60 minutes. The lengths of the interviews were determined by the detail and insight the participants provided during the interview. The interviews took place over a 1-month time period. The consent forms were signed and scanned into a password-protected folder on my laptop computer. The digital recordings were transcribed, using the Temi software, and coded by participant's site and participation number, and then recorded. I was able to create codes and categories after themes began reoccurring in different interviews. After being unable to find any new significant themes, I reached saturation after interviewing the 15 participants. The interviews were coded using Microsoft Excel. All collected data were electronically stored on a password protected external hard drive. There were no variations in the data collection process.

Data Analysis

Data were transcribed using the Temi software, and coded using Microsoft Excel. The interviews were transcribed verbatim to capture the participants' perceptions. The data were analyzed using an ecological model, the themes were categorized in two sections: need support and need for services. The need for support had 6-sub themes that emerged.. The need for services had 6 sub themes that emerged. Field notes were added and coded with data to provide an in-depth analysis to the interviews. To assist with mapping the data, the two themes, interpretation and interdependence, were used to explore subtheme groups that aligned with the research question. The twelve subtheme groups were placed into the two theme sections, interpretation and interdependence. I then explored the data from each participant that aligned with the subthemes.

Table 2

Interpretations and Interdependence

Support	Services
Case Loads	Housing First
Family Dynamics	Harm Reduction
Mental Illness	Ryan White
Substance Abuse	Medical Adherence
Medication Security	Transportation
Stigmas	Pillboxes

Evidence of Trustworthiness

Trustworthiness was achieved by the implementation of credibility throughout the study. Credibility was implemented by peer debriefs with the dissertation chair, in regard to negative cases and concerns. The negative case I encountered was a participant who provided little insight to interview questions. One of the concerns about the study was the theme, Ryan White, which was not explored in Chapter 2. The Ryan White Act will be further explored in Chapter 5's Limitations to the Study section.

Transferability was implemented by providing the descriptive details from the study. In this study I utilized audio recordings, from face-to-face interviews, and transcribed the data using the Temi software. I then used Excel spreadsheets to align answers, identify themes, and code data. The 15 participants had various education levels, ranging from high school to doctorate. The participants were employees from outpatient medical centers in the metropolitan area. There were four outpatient medical centers in the metropolitan area that the participants were employed at.

I implemented dependability by ensuring that the research question aligned with the data collected, the participants and the interview questions. Two respondents to the social medial post were disqualified from participating in the study because they did not fit the criteria of medical provider. Four respondents to the social media post were disqualified because the level of care they provided was not aligned to the research question.

Confirmability was implemented by identifying personal or potential bias I may have, working with the homeless population. I separated any bias I may have had being a mental health therapist, and case manager, and remained objective throughout the

interview process in my role as a researcher. To remain objective, I did not lead responses or answers throughout the interview process. I also allowed the participants to identify and define any terms or practice models they implement as medical professionals.

Results

In this section, I presented the findings from the data collected from the 15 participants who were medical providers at metropolitan area outpatient medical centers. The data collected provided themes of interpretation and interdependence. Interpretation was coded as the provider's insight. Interdependence was coded as the usage or need of community or government services. I used quotes from participants to support themes and supporting views of participants. The goal of this study is to gain an understanding of the provider's perception of working with the homeless. Twelve subthemes were found from further data analysis that included case management, family dynamics, stigmas, mental illness, substance abuse, Housing First, harm reduction, Ryan White, pill boxes, medication security, transportation and medical adherence.

All interviews were carefully analyzed to answer the research question, what are the perceptions of medical providers who attempt to gain medical adherence from mentally ill and HIV-positive homeless clients in a large metropolitan area on the East Coast of the US. During the interviews, I asked 18 open-ended questions and made appropriate probing attempts to gain clarity and understanding from questions. The themes and subthemes emerged from the interview questions that aligned with the research question. The participant statements are coded and reflected below.

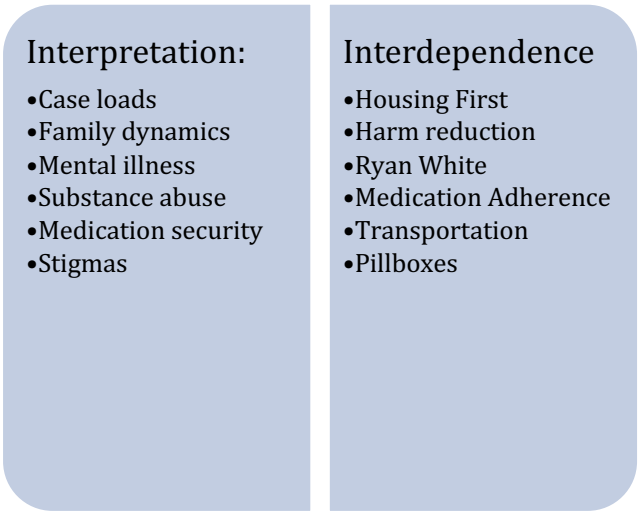

Figure 1. Themes and subthemes that explored the perceptions of providers.

The first three interview questions, found in Appendix B, were used to complete demographics with participants, along with establishing a baseline for each medical provider. The fourth question, "In your own words, how has your education level or training impacted your engagement with clients," had a variety of answers that were broken up in two categories, impact or no impact.

The answers to the fourth interview question received mixed responses from providers. Some providers discussed their complex caseloads and did not provide a measurable answer. Some providers, such as P3, believed their education in nursing impacted their engagement with clients. P12 believed that their education made them a better case manager. P2 believed that their work at the medical center helped with

engagement. P4 identified the importance of education, but said it does not help teach how to engage with the client population.

Tables 2 through 14 provide responses that are grouped in the 12 subthemes identified from the interviews. The subthemes were created based on the answers the participants gave in Interview Questions 3–18. Tables 2 and 3 explored the responses from the same five participants to identify a relationship between caseloads and medical adherence.

Caseloads, Table 2, was the first subtheme I identified under the theme support. The caseload sizes varied between providers and their roles. Persons 8 and 15 identified caseloads of 200–300 people, while persons 1,3 and 13 identified caseloads of 16–30 people.

Table 3

Caseloads

Respondent	Case loads
P1	I have currently right now, 25 people on my caseload.
P3	I probably had about 25 to 30. I would say most of those patients had co-occurring diagnosis of either depression, anxiety or some other mental health disorder. In my current practice here, I'd say probably about 50% of my patients have a mental health disorder.
P8	My panel of patients is currently about 300.
P13	Currently, I have a caseload of 16 to 17 clients.
P15	I probably have over maybe 200 patients, maybe more than that. But give or take, I don't see all of them all the time. I might see them maybe once a year, but some, I have some patients that I see regularly, like once a month.

Medical adherence was the second subtheme identified under the theme support. Participants Identified interventions they used to gain medical adherence. P1 stated they utilize the role as partner, and develop a plan with the client. Some participants, such as P13 identified the need for housing stability for medical adherence. Family support and mental health were also subthemes that emerged for medical adherence.

Table 4
Medical Adherence

Respondents	Medical Adherence
P1	I have allowed the patient to tell me what works best for them instead of me coming out with a plan for them. They have an active role or active partner. We have a partnership and we develop a plan that is modifiable according to how it goes.
P8	We've tried in the past like buddy systems. We still have groups and certain group members wouldn't mind being paired with a buddy for treatment support. I also have used phone apps.
P13	I think stability that includes housing stability and a good strong support system. Being connected to mental health can impact someone's ability to adhere to medication. If you don't have a stable house, then where are you gonna store your medications
P15	I just asked them why they have a problem with coming to my appointment or a problem with getting to the pharmacy to get medicine. Just trying to figure out why aren't you taking your medicine? Some of them might've had suicidal thoughts that day.

Tables 5 highlights the subtheme of mental illness. Two themes that emerged from mental illness were medication and depression. Participants in this study stated that clients will take their HIV medication, but will not take their mental health medication. The second theme was each participant identified depression among their homeless clients.P11 highlighted the relationship between addiction and mental illness as numbing something.

Table 5

Mental illness

Respondents	Mental illness
P1	Most of my HIV-positive clients have mental illness. They take their HIV meds. They may not take anything else. Then some of my bipolar people, because they don't have their mental health issues addressed, they get into a state of severe depression, then they won't take anything. And then they can be in depression, a state of depression for months. And then depression can lead them to not being responsible, like far as paying a telephone bill so we can keep in contact or they'll just go off and do their own thing and disconnect themselves with care.
P7	I do a lot of patient education, about overdose prevention, about, neurobiology of addiction. What goes on in the brain, really helps folks try to de-stigmatize like addiction and mental health, like any other comorbidities or mental health diagnoses. I'd say probably 99% of my clients have some kind of mental illness diagnosis or are being treated. I'd say that in terms of HIV, maybe a fourth to a half of that. Most of them are high risk or have been high risk at some point in their lives for HIV.
P11	I would say a hundred percent HIV really isn't the issue. The mental health around it is the issue. I hate to say that it was 100%, but just about every one of my patients that I do talk to, they have some type of mental health situation, whether it's depression, anxiety. They have some mental health component and I think along that was before the HIV and then the HIV just really activated it. So when you're seeing homelessness, mental health and you're HIV-positive and we're talking about medical adherence. Some people are homeless because of different reasons. Domestic violence. Some people are homeless because of work, you know, they can't find a job. There's so many different reasons and variations of homelessness and then to tackle mental health.

Table 6 identified the subtheme mental illness, many of the providers identified addiction as being a major influence among their client population, which has become a barrier for their adherence. Many of the providers identified the difficulty of their clients to adhere to basic needs due to addiction. P1 highlighted the impact addiction has on the

immune systemic a HIV-positive person going through withdrawal. P11 highlighted the relationship between addiction and mental illness as numbing something.

Table 6

Substance Abuse

Respondents	Substance Abuse
P1	Some of the challenges I've faced trying to get me to coherence is the drug addiction part or the severe mental illness part. I have a few ladies that are bipolar and sometimes when they're offered their medication it throws them off of everything. Drug addiction is severe as well. Until you can get the mental health and the drug addiction under control, you can't even begin to discuss being medically here because people that are drug-addicted, their main goal is to get their drugs so they won't be sick. They're not thinking about medication and not thinking about where they live. They're not thinking about their next meal when they're thinking about not having to go through withdrawal and to maintain their addiction. Same with mental health. Mental health is more so about my clients don't like the way the medication makes them feel, so they won't take the medicine.
P7	For me working in addictions, when somebody is really in the throw of a substance use their substance use disorder is really running their life. You know that is a time when it becomes very difficult to function in other ways, including taking care of basic needs, like taking your medication. Folks who are dealing with opioid use disorder, like those who experience withdrawal, like who also had HIV are more like their immune systems are even weaker, which makes sense because if you're in withdrawal you feel horrible.
P11	A lot of our patients and they come from really difficult backgrounds, they're diagnosed most of the time from drug use. Why were you doing what you were doing as far as your drug use? A lot of times when you're using drugs, you're numbing something, you're numbing something. So and then with them having the diagnosis causes other mental health issues.

Housing First was a subtheme for services that explored provider's insight to the social service and social policy model. Tables 7 provided responses from participants that reflected subthemes of Housing First. The responses for Housing First varied from, the

program improved healthcare, reduced barriers, not having knowledge of Housing First and the programs ineffective in the metropolitan area due to the large number of vacant homes, that should be used to house the homeless population.

Table 7

Housing First

Respondents	Housing First
P2	Housing First is a model that doesn't require contingencies to having a roof over your head. A lot of housing programs have this like contract with people that they're housing, like they have to meet this certain criteria. Housing First eliminates that. It just says people should have housing. We shouldn't have to prove to you that, that we are going to do X, Y and Z. People should just have housing because housing is healthcare.
P3	So Housing First means that people should be in homes that there shouldn't be requirements. We put a lot of barriers on things and we do that in a lot of different ways. We definitely do it from a housing perspective in terms of homelessness. But if you look at it, we also do it for substance use and mental illness. You have to see a therapist three times before you can see a psychiatrist. Why do you have to prove that you can stay in a house before we put you in one. It's like there's these barriers that don't need to be there. If you're diabetic, we're going to give you diabetic medication. No questions asked. We're not gonna say you can't have carbohydrates anymore where you have to prove to us that you can only have so many carbohydrates a day where we're like, okay, well we have to treat it regardless. And I'm not really sure why as a society we haven't gotten to the point where it's like a priority to put people first. I also don't understand why people kind of come so late to the game. So there was a man, a homeless man who died recently and everybody's like, all fussed about, like giving him a proper funeral. And it was like, well, nobody was fussed with giving him a proper life, like giving him a home or a place to stay warm. On the one hand, from a retrospective sense. It's like, oh well, this poor man died in the cold and it's alright. But you also probably walked by him all the time and it never dawned on you to like necessarily do anything. Then it's like those one time interventions versus like the lifetime intervention. I struggle with how if you're not independently wealthy, how can you help with those more lifelong

	interventions that can make an impact versus the short term interventions.
P5	Housing First is something where it's stressed the importance of being housed and not being a priority. I think. The first thing that needs to be taken care of before, I think it's government funded. Then part of Housing First, maybe, is being connected to a supportive housing type team where they have support to make sure they can stay housed and other things are taken care of.
P9	I think that it's like Housing First is health first, right? Like that's what it means. Like, if you don't have stability, then you're, you're missing a lot of things like, peace of mind, a place to sleep, a place to keep your belongings safe. A place where you can take a shower comfortably, a place where you can cook your own food. The things that we take for granted and we don't think about when we're in our homes. Those are, those don't exist for people without housing. So housing first is priority for, for healthy people, healthy communities, no barriers and no discrimination. I think housing first means a reduction of barriers or no barriers, right? Which means less stress about how we're going to help this client find housing, right? Like there's so many requirements, eligibility things. Each program has needs a, B, and C. you have to be a veteran, you have to be in recovery, you have to be, um, living with HIV, you have to be trans. Like every, every program has its own rules and it's probably because of a grant that they're under. Right? So I think just, okay, housing first for me is like easier to house people in need. Right? Like it shouldn't be like that. It should just be this person has been experiencing homelessness. I shouldn't have to prove it by documenting it. I'm like, that's insane. How do you document someone's homelessness? But we're doing it somehow.
P15	Crap. Because I feel like there's so many vacant houses. It should not be a homeless person out here. I mean it, we, it's, and to be ample housing programs for people, whether it's HIV or not even just HIV, veterans, everything, it's just, it's ridiculous how many homeless people we have and we have all these vacant houses around. So I think housing in the metropolitan sucks major.

Table 8, Harm reduction, was a subtheme for services. Providers identified the importance of providing hope to clients and making small impacts for clients with substance abuse histories.

Table 8

Harm Reduction

Respondents	Harm Reduction
P5	So I think we've worked with clients in some pretty rough situations. So knowing how to maybe not solve their issues, but how to reduce harm is a huge, it gives options and also hope where otherwise maybe we wouldn't quite know what to do if you're looking at either problem being solved or unsolved, but with harm reduction, it's not so much about seeing a full resolution, but just trying to have the best for the client in whatever situation they might be in. So it provides more options and more hope.
P6	It's helpful. Harm reduction is helpful for me to recognize that small changes can make an impact. Small things can help. Small changes can make an impact. I have a hard time working with people substance abuse. The recidivism is so high. Even a little bit can make a difference.
P9	I think that that as a provider it would be so many successes, you know, like this person is how it was, how it was. That was how house, because housing first and harm reduction to me is leaving the door open, right? Like it doesn't matter what, what's happening, what, what you're going through. We're here for you no matter what. And that's to me, what that means. It's building trust and, and giving people hope. And it, for me, harm reduction for reduction is also like good for the staff because this isn't my life, this is your life. And I understand that.

Table 9, Family Dynamics, provided insight on the impact of family, along with providing insight on the impact of family. Participants, like P5, identified the benefits family input provides. P11 identified the challenges family may present, because the topic of HIV may be a hard subject to discuss.

Table 9

Family Dynamics

Respondents	Family Dynamics
P5	I have some clients who have family members who are very closely

	involved and it will come in with them to appointments or they stay with him at home. So a lot of times I actually would talk to the client and also to that family member or support person because they make sure that the client gets their medication. And those clients do very well. I have other clients who don't have that kind of support or family structure or people they can talk to. And for them I think it's a lot harder, they have a hard time remembering and keeping organized.
P7	I try to frame it like you have a toolbox, everybody gets a toolbox and medication is just like one thing that you're putting into your toolbox. Like therapy might be another thing or case management or the things that you like to do for fun or your family, your support network.
P11	Many of the patients that I've talked to family members don't know. It's really hard for them to have discussions and talk about HIV.
P15	Sometimes they bring their family members and some of their families don't understand HIV or the treatment that they're about to endure, medications stuff like that.

Table 10 identified stigma, participants identified challenges with sex, family and mental illness, in relation to the stigma attached to HIV. P4 identified the difficulty to stay in a house because the stigmas attached to HIV medication and having a secure place to hide medication without a client disclosing their health status.

Table 10

Stigma

Respondents	Stigma
P4	Some people think just to have a shelter over your head, making that homeless, that's not true. You know, homelessness. You could stay with a friend and still be homeless because you're vulnerable. Any minute. I can tell you, get out. It's not yours, it's not stable, you know? Um, so, and if you're staying with me and now I want you to know my status and I'm gonna bring my medicine in your

	house. Right? And so those type of things you have to think about when you deal with the homeless population is medication
P6	One thing I noticed about the people that have HIV is that they take their HIV meds. They're really connected to that. And except their HIV medicine, it's more the psych medicine that's the problem. It's, you know, the stigma of having a mental illness, the stigma of accepting it and like in reality, I don't know what's going on in their head, you know.
P7	I do a lot of, a lot of um, patient education about overdose prevention, about neurobiology of addiction. What goes on in the brain, really help folks try to de-stigmatize like addiction and mental health. I think there's still so much stigma around HIV, but I think as you know, time goes on and the, we have so many medications and so much more information now than we had even just two years ago about HIV.

Table 11 highlighted Ryan White, which was a theme that emerged organically throughout the course of several interviews. The Ryan White Comprehensive AIDS Resource Emergency Act was passed in 1990 and is currently used as a collaborative model within the local, state and national government (Agbodzakey, 2016). Ryan White is also used with state and non-state stake holders to promote healthy outcomes for individuals diagnosed with HIV and AIDS (Agbodzakey, 2016). The Ryan White Comprehensive AIDS Resource Emergency Act has been renamed to the Ryan White HIV/AIDS Program. Participants of the study identified some of the services used by Ryan White, which included housing, food and transportation. Organically, 4 providers discussed Ryan White services and interventions used during the course of the interviews.

Table 11

Ryan White

Respondents	Ryan White

P2	Ryan White is defined by individuals living with HIV who must live in the metropolitan, and also, their income level is at 500% of the federal poverty line or below. I was working mostly with Ryan White patients. I monitor Ryan White data. So what that means is I make sure that all of our Ryan White eligible patients have appropriate information in their charts. I make sure that they all are connected with an assigned case manager, and if they're not, what are we doing to help ameliorate that?
P11	There's a lot of things out here for HIV-positive individuals, but what population, we're looking at, a population of primarily African American individuals and unfortunately disparity, prejudice, discrimination and racism still exist. And that's why we do have such programs like Ryan White's, we have a lot of clinics within certain amount of miles, to provide services to HIV-positive individuals.
P12	We have clients all the time who come seeking financial assistance for eviction prevention or utilities assistance. Oftentimes because we have Ryan White funds that pay for this, we are the payer of last resort. So they have to seek assistance from at least two other places before they come to us. That's a Ryan White general rule. So if I have a client who can't get around transportation wise, and I know that the only way they can get around is by bumming rides from people who charge a ridiculous amount of money. I'm not going to send them to somewhere that's, you know, half an hour away or whatever. Like I have to be very conscious of where I'm sending clients. It needs to be close to their homes so that they can get to it without having to pay somebody or you know, helping them find transportation so they can then get the air and then there's no guarantee they're going to get funding at these places.
P15	I work under the grant, Ryan White, I think part B, which is nonmedical case management. I deal with patients that are HIV positive. Some have Hep-C also dealing with mental health issues, substance abuse issues housing issues.

Medication security was a common theme with many providers. Participants stated that clients have had their medication stolen, in shelters and on the street. Participants also stated that homeless clients do not have a safe place to store medication. Table 12 highlights some comments made by providers.

Table 12

Medication Security

Respondents	Medication Security
P1	When you have a client that's in a shelter, unless that person has already bought into and sees the value of being adhered medically and mentally, I think it's more difficult to try to keep up with a person that's homeless and in shelter because their locations constantly change and because they're constantly moving around because they have strong mental health stuff going on and most of the time they have addiction issues going on so they're constantly moving and they don't have resources like a phone, an address or contact. So it's more difficult to try to keep those individuals medically adhere than somebody who's stable and has resources in place to keep them stable and to keep them engaged in care.
P2	You don't have a safe place to take your medicine or a safe place to keep your medicine, how are you expected to be adherent? You know, I think, regular people who don't necessarily they don't necessarily have the same barriers or challenges every day that somebody who is living in extreme poverty that might not have stable housing does still have, they still have trouble taking their medications on a daily basis. Even if you have a medicine cabinet, um, you know, you still might forget once or twice a week taking that and, looking at how somebody might be able to remember every single day. If you're living in the shelter, you've got to leave the shelter at 5:00 AM and line back up at what 3:00 PM? How are you expected to also remember to eat with your medication, take them at a certain time, make sure they're stored in a dry, safe environment. It's definitely a lot more challenging for somebody who doesn't have, doesn't have the ability to safely store medications and, and doesn't have to think, um, you know, will I have a place to sleep tonight?
P3	I think there's also some misconceptions on the street in terms of like, I have a pill bottle. So it's like, it might be good. So oftentimes it can be stolen. It's also really easy to lose your stuff when you're carrying it around all the time. I'm in the shelters, I find that stuff still does go missing a lot. Some shelters are really great in terms of like helping patients to lock up their meds and stuff.
P12	I can't remember if I said this already or not, but I've had clients who say having their med stolen is a big issue.

The subtheme pillboxes emerged when I explored interventions used to gain medical adherence. Participants in this study identified methods to use pillboxes for medication security, along with retaining clients in care. Participants identified medication being stolen prior to the usage of pillboxes, and how pillboxes can reduce multiple pharmacy visits for clients.

Table 13

Pillboxes

Respondents	Pillboxes
P3	The pillbox intervention worked the best. Because I found themes in terms of reasons. Patients were struggling at the pharmacy, They didn't have copays. They would get frustrated with going, having to go to the pharmacy multiple times. So because of the clinic setting that I worked in, we were able to have the nurses pick up the meds and do pillboxes and then that was also a nice way to do either a monthly check in or an every two week check in just to be like, okay, how are things going? Wasn't always perfect, but it definitely reduced a lot of barriers for people.
P12	Sometimes we can work with that because we do have a medication adherence program here. It's like the, it's MST, Medication support team is what it stands for. Um, and a lot of clinics have something similar where they help you fill a pill box, so it's like a week at a time, so you're less likely to worry about your meds getting stolen when you have a week's worth at a time instead of a whole month's worth. Its sometimes easier to hide when you can just slide the pill box in your coat pocket or whatever you have. But that doesn't always work for clients either. Then when you add mental illness into the mix, that just can exacerbate some things, especially clients who are so depressed that they have no will to live.

Transportation was a common subtheme that emerged from throughout the interviews. Participants identified the need for transportation to keep medical appointments, along with challenges with providing transportation for retention of

services. Participants stated that transpiration is a high priority need, such as housing in regard to healthcare. Table 14 provides some comments providers have made.

Table 14

Transportation

Respondents	Transportation
P5	Some clients who really struggle financially, I think transportation is the biggest thing. Getting here and back home again. So that was sometimes be a barrier for them coming into appointments.
P8	Our social workers can give them tokens, but if you aren't familiar or aware of these services, you don't know how to access them. so transportation has been an issue.
P9	Some clients, like it's just, they just need that extra little push or, you know, nudge. Like, hey, what do you need? Like, we want to help you. And they're like, yes, I need this. And that's it. Right? So some people, it's just tokens and they can make it in, they got their meds, they know what they're taking about, and other clients, there's a bunch of other things going on.
P10	They're very motivated to get this under control. For clients that that usually persists. They usually stay that way and they take their medications and often need very little guidance, where they're able to articulate what kind of help they need, like they need transportation.
P11	Even if the needs are not here, we can have someone help you receive those needs. And a lot of patients they'll tell me a lot of it is housing and transportation.
P12	Transportation is another major barrier. If clients can't get here, then they're not going to be here to get their meds and follow up and do all the things they need to do. Our program in particular really works to remove that barrier, but there are clients who just, it's still a barrier and I don't, we don't have a solution for every client. Unfortunately, transportation sucks, and so it's really hard to meet everyone's needs perfectly.

Summary

In this chapter, I reviewed the data collection and the process of analysis. I reported the findings from the 15 participants who were selected using purposeful

sampling strategy through social media outlets, Facebook and LinkedIn. Each participant completed an informed consent form. The responses from the face-to-face interviews were used to explore the participants' experiences working with the homeless population.

The primary goal of the research was to explore the medical provider's perceptions to gain medical adherence with homeless patients. The 18 interview questions yielded two themes, interpretation and interdependence. The providers' answers to the interview questions provided 12 subthemes: caseloads, family dynamics, mental illness, substance abuse, medication security, stigmas, Housing First, harm reduction, Ryan White, medication adherence, transportation and pillboxes. The findings are useful for identifying the perceptions of medical providers that provide services to homeless clients diagnosed with HIV and mental illness. In Chapter 5, I will provide an interpretation of the findings, a discussion of the limitations, recommendations and implications of social change.

Chapter 5: Discussion, Conclusions, and Recommendations

Introduction

The purpose of this generic qualitative study was to explore the perceptions of the medical providers who worked with homeless patients diagnosed with HIV and mental illness in a metropolitan area of the northeastern United States. The intention of was to explore how medical practitioners use client's ecosystems when making informed decisions. Ecosystems include housing, income, family, and programs set in place by local, state, and federal legislation. Previous studies found that homeless people suffer from cardiovascular disease, pneumonia, and mental illness at a higher rate compared to people who are housed (Kaduszkitwicz, Bonchon, Busche, Hanamann-Wiest, & Leedon, 2017). By answering 18 interview questions during face-to-face interviews, the participants afforded an understanding of their perceptions and answered the study's research question. The results of this study are expected to be useful in further educating medical providers on best care practices when they engage the homeless population.

Interpretation of the Findings

The research question asked "what are the perceptions of providers who attempt to achieve medical adherence from mentally ill and HIV positive homeless clients in a north eastern metropolis in the United States?" Two themes emerged from the data: interpretation and interdependence. Interpretation refers to the way medical providers viewed the needs and challenges of the clients. Interdependence refers to the services, programs or policies providers used to gain medical adherence.

This research affirmed that of Kadusczkiewicz et al. (2017), who concluded that there are serious health challenges among the homeless, who often suffer from mental illness and substance abuse. The research also affirmed Hirpa et al. (2016), who stated that homeless people have higher rates of health problems. The findings supported Corrigan et al. (2017), who believed that mental illnesses, such as schizophrenia and bipolar disorder, are common among the homeless population, but I found that depression was commonly identified among the participants. The findings supported Hsreh (2016), who believed that social stigmas about medical problems affect health disparities. This research found that transportation was a major barrier to homeless clients medical engagement, in contradiction to Stafford and Wood (2017), who found high rates of trauma and health challenges created difficult barriers for medical engagement.

The theme, interpretation, had subthemes of caseload, family dynamics, mental illness, substance abuse, medication security and stigma subthemes. Caseloads ranged from 16–200 clients for case managers, therapists and registered nurses.

To obtain medical adherence, providers, such as P1, attempted to have clients state what was best for them and provide a partnership role in their treatment planning. P13 said housing stability and a good support system provides medical adherence. P5 stated that some clients have family members or other supportive people work closely and are involved in the engagement process. P5 also stated that sometimes clients don't have a support system. P11 stated that many clients don't discuss their HIV around their family because it is difficult to talk about. P15 stated that many families don't understand HIV or the treatment.

Some people may not want to talk about HIV or treatment with family or their support system because of the stigma associated with HIV. P4 stated that staying with friends can still make you vulnerable, because of being told to get out, bringing medicine in the house could possibly mean having to disclose their HIV status. P6 stated that taking the HIV medication, the stigma of mental illness, and taking psych medication have been problematic. P1 found that the majority of their clients have mental illness. P7 stated that they attempt to de-stigmatize addiction like mental health. P7 also stated that working with someone who has substance use disorder can be difficult because the substance usage impacts basic needs, like taking your medication.

Medication security is a challenge with the homeless population. P1 stated that homeless people with addiction are the hardest to keep up with, because they change locations between the streets and shelters. P2 found that if you don't have stable housing you cannot have good medical adherence. P2 added that leaving from the shelter at 5am and returning at 3pm can cause challenges with taking medication along with keeping them safe. P12 stated that stolen medication has become a big issue among the homeless population. The participants interpretations in the subthemes; caseloads, family dynamics, mental illness, substance abuse, medication security and stigma, correlate together and affirms the theme interdependent because of the subthemes Housing First, harm reduction, Ryan White, medication adherence, transportation and pillboxes.

Medication adherence includes taking medication as prescribed and adhering to treatment plan goals. P13 stated that stable housing and a good support system, along with being connected to mental health support can improve medical adherence. P2 stated

that Housing First does not require contingencies, does not require contracts, and provides housing. P3 stated that people put too many barriers to treatment, when we can provide lifetime interventions. P9 stated that Housing First should be a requirement for healthy people and healthy communities.

Housing First works in concert with harm reduction, as P5 stated, harm reduction provides hope and problem solving to provide more options for more hope. P9 stated that Housing First and Harm reduction build trust. Programs like Ryan White help provide services and medical clinics to clients. P2 stated that Ryan White services people with an income 500% at or below the poverty line. P11 stated that there are a lot of Ryan White clinics in the metropolitan area that service HIV-positive clients. P12 reported that Ryan White has assisted with the transportation of clients for appointments. P5 stated that transportation is a big barrier that prevents clients from making appointments. Challenges with housing and transportation can lead to theft of medication, P12 stated that pillboxes can reduce theft, because it is easier to have then all of your pills.

The themes and subthemes work together to provide a perspective of medical providers' perspectives to improve the well-being of clients. Ryan White assist homeless clients with housing, but programs like Housing First will protect the client from discrimination and reduce barriers for evictions or not having stable housing. Long-term housing through Ryan White and Housing First programs may reduce the likelihood challenges of compromising family dynamics due to stigmas, because of medication security. Clients can utilize Housing First if they suffer from mental illness or substance abuse. Harm reduction is designed to keep clients housed that maybe addicted to

narcotics or alcohol. Having housing through Housing First or Ryan White will promote medication security and medication adherence, in concert with pillboxes and transportation to medical appointments.

Based on the interpretation of the data given in this study, homeless clients with HIV and mental illness can find themselves in one of four ecomaps. The first ecomap, Figure 3, illustrates a housed client at the center, with substance abuse a substance abuse history, along with mental illness. The client is housed, therefore has medication security and receives a pillbox. The second circle in the ecosystem reflects that he is connected on a caseload, and receives harm reduction services, such as Housing First and Ryan White. The third circle in the ecomap illustrates that the client is medically adherent, and possibly receives transportation for his medication appointments. The fourth circle represents the stigmas and family dynamics may not be a big impact towards his life due to the other systems set in place for his well-being.

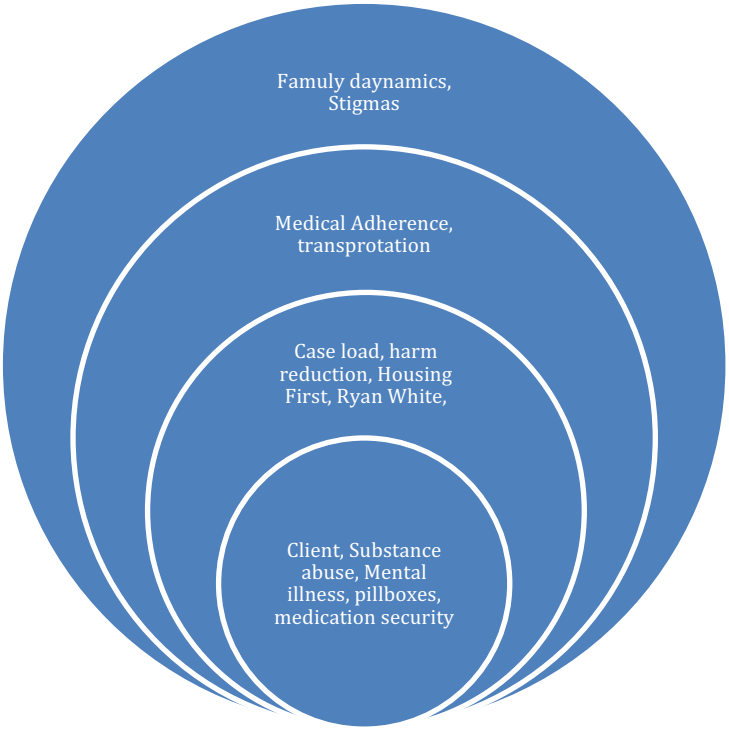

Figure 2. Ecomap of client with housing, has mental illness and substance use history.

The second ecomap provides context of a person with mental illness and a substance abuse history without housing. The client appears to have more of an impact with his family, but there is a stigma close to him, possibly because of his HIV status, substance abuse or mental illness. The client is also connected to Ryan White services. The third circle represents how far the client is away from medical adherence is from him, but he is reflected on a person's case load. The fourth circle represents the client's medication security, because he is not housed, medication security can be a challenge.

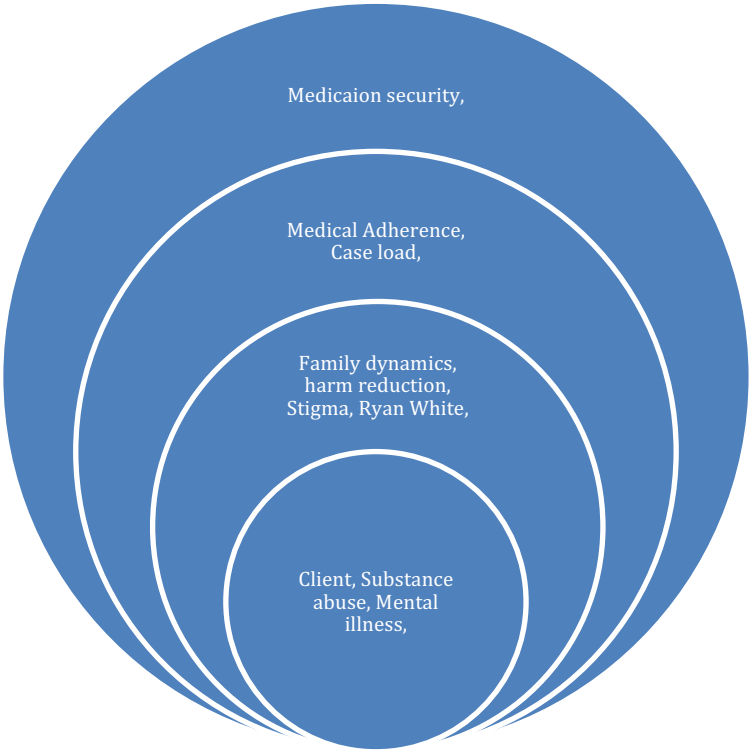

Figure 3. Ecomap of client without housing and has substance abuse history.

The third ecomap represents a client with housing but does not have a substance abuse history. The client's pillboxes and medication security is reflected in the first box because has a place to stable live. The second circle reflects the stigma, which maybe present because of the client's mental health, but he does have support for housing with Ryan White and Housing First services. The client is also medically adherent. The client's third circle maybe family dynamics, because he is not too strongly dependent on them in the first two circle due to Housing First and Ryan White services. The fourth circle, transportation, may be present because of the challenges providers identified in this research.

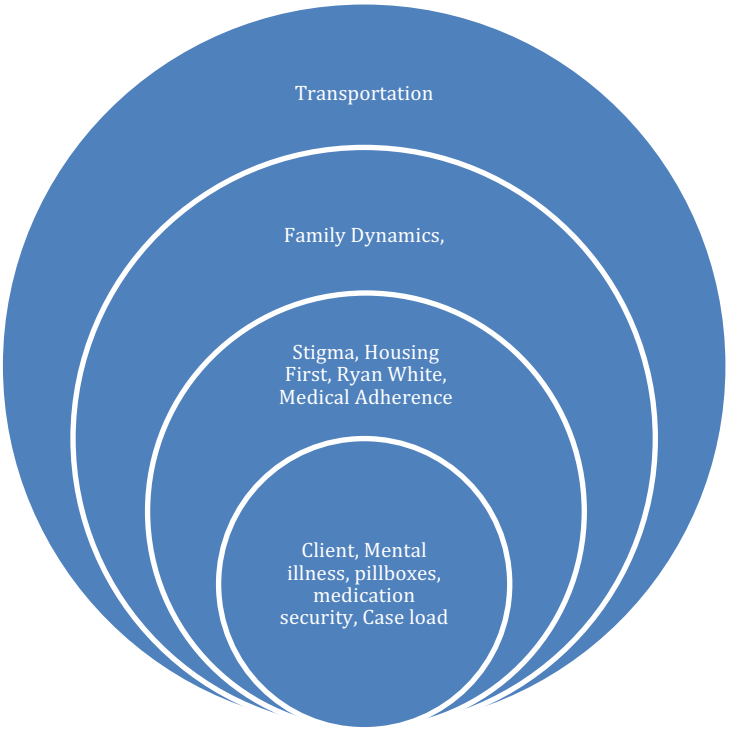

Figure 4. Ecomap of client with housing but without substance abuse history.

The final ecomap reflects a client without housing or a substance abuse history. The client's mental illness, stigma, and Ryan White needs are present in the first circle. The client maybe more medically adherent due to his sobriety. The sobriety may have him more engaged with his service provider to gain housing through a Housing First program. The client may also be more engaged with his family, because of his sobriety, and medical adherence. The client may face challenges of medication security because he is homeless, but he has a greater chance of not losing his medication because he has a pillbox. By following this ecomap, the client's greatest challenge would be transportation.

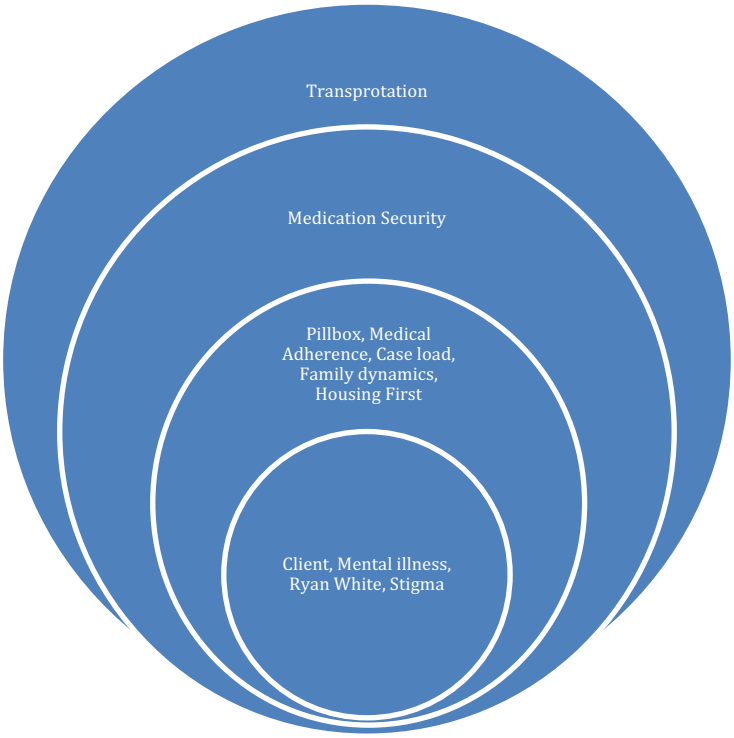

Figure 5. Ecomap of client without housing or substance abuse history.

Limitations of the Study

Despite the rich data gathered from the 15 interviews, this research study has several limitations. The focus of this study was to gain an understanding of the medical provider's perceptions working with homeless clients diagnosed with HIV and mental illness. The participants in the study were employed in metropolitan area outpatient medical centers, that provided primary care services to patients. The study did not take into account the entire scope of medical adherence with the homeless population in the metropolitan area.

The first limitation was that many specialty areas were not represented by participants. The research did not explore the perceptions of dentists, providers from outpatient pediatric centers, or providers that work in dialysis. This research study did not

explore the perceptions of medical providers that work with families that are homeless with the dual diagnosis of HIV and mental illness. After completing the interviews with the 15 participants, the perspectives of medical providers that work outpatient would have provided good insight in relation to medical adherence and retention interventions used with the homeless population.

The second limitation to the study was it did not receive insight from acute care practitioners, such as cancer, cardiac care and physical therapy. Chapter 2 of this research study highlighted the health challenges with the homeless population, such as cancer. The perspective of outpatient physical therapist, cancer and cardiologist that engage with the homeless would have provided greater insight to the study.

The third limitation was the perspectives of medical providers that work with gay, lesbian, bisexual and Transgender clients. Two providers in this study discussed condom usage and stigma related to gay male clients. This study did not explore methods used to obtain adherence specifically with gay and transgender clients. Services like PrEP was discussed for safe sex practices by two providers, but further research would be beneficial for providing greater levels of care for gay, lesbian, bisexual and transgender clients.

My research also did not provide clarity to two of my three assumptions. My first assumption, medical providers engage with clients without uniform practice, was not demonstrated in this study. Many providers in this study were unable to define Housing First. Most of the providers identified the benefits of harm reductions, but used different strategies to engage clients, such as motivational interviewing or the nursing model. The most common strategy identified by providers was motivational interviewing.

The second assumption was training, education and race impact engagement with clients. This was not much addressed in my research study. One provider identified the importance of being represented as an African American working with African American clients. Another provider highlighted challenges with undocumented and non-English-speaking clients.

The third assumption was providers take into account the limitations of homeless clients. This assumption was supported as reflected in the two themes of interdependence, and interpretation. The third assumption also was illustrated through the detailed subthemes in this research study.

Recommendations

The findings of this study established an increased understanding of medical providers that provide services to homeless clients diagnosed with HIV and mental illness. Future research will need to explore medical practitioner's understanding of Housing First, along with exploring barriers providers have experienced working with non-English speaking clients. Future research should explore the perceptions of medical practitioners that include; psychiatrist, pediatricians and dentist. The perceptions of providers in specialty care clinics, such as; cardiology, cancer centers, and dialysis should be explored in future research. The future research should explore the perceptions with interventions used to improve long-term health outcomes. Future research should explore the limitations to this study, such as exploring challenges with medial adherence among the gay, lesbian, bisexual and trandgender clients. Future research should also explore

challenges among the homeless non-English-speaking clients along with immigrants diagnosed with HIV.

Two providers, at very different times during the interview process, discussed challenges with language barriers, and non-English-speaking clients. While discussing the phenomenon, one provider discussed the difficulty with providing medical education with the non-English speaking client, along with the challenges of paying for his medication. I believe more research should be done to explore this phenomenon and provide better education and care for non-English speaking medical providers.

Policies and programs should be implemented to improve Housing First for clients to reduce homelessness, along with increasing transportation for clients to obtain transportation to-and-from medical appointments. Programs such as Ryan White are designed to reduce barriers for treatment, such as paying for medical and prescription costs. Unanimously, providers identified challenges with transportation, some providers identified the need for transportation is synonymous with the need for housing. Policy writers for Ryan White and Housing First should explore methods to include transportation to improve medical adherence. Increased advocacy for home visits should be implemented by providers until more services can be implemented for transportation.

Implications

In this study, I explored the perceptions of medical providers that work with the homeless, HIV-positive and mentally ill. Two major subthemes emerged in this study, which were providers being unsure what Housing First was, but engaging with homeless clients, and the need for transportation to medical appointments. The first implication

would be to increase education on Housing First for medical providers. The second implication would be to explore methods to provide transportation for clients to keep medical adherence.

In my research, some providers had knowledge of Housing First, and others did not. Providers identified the benefits of Housing First, such as improving medication security, but many participants felt like school had no impact on their engagement with clients. Increasing education on Housing First at a college level, along with continued learning courses can create effective change and improve engagement.

Social policies and practice models, such as Housing First, should explore methods to increase medical compliance by providing more effective means of transportation to medical appointments. This research identified the need for transportation for medical adherence. Services and policies, like Ryan White, are designed to reduce barriers, but the challenge of transportation still exist. Future research should be done exploring barriers to transportation and innovations to how clients can be transported to appointments to improve medical adherence.

Conclusion

Homeless people living on the street, emergency shelters and public spaces often have poor health, death related intoxications and other infections (Kaduszkiewicz, Bohon, Bussche, Hansman-Wiest & Leedon, 2017). Health and mental illness can create challenges for medical provider outcomes (Corrigan et al., 2017). This study was developed to explore the gap in literature of the perceptions of medical providers that attempt to gain medical adherence with the HIV-positive and mentally ill homeless

population. The study used a generic qualitative design with face-to-face interviews. The results from this study provided two themes, interpretation and interdependence. The findings also provided 12 subthemes: caseloads, medical adherence, mental illness, substance abuse, Housing First, harm reduction, family dynamics, stigma, Ryan White, medication security, pillboxes and transportation. The results from the study displayed positive interaction with providers, and how they use a client's ecosystem to provide best care interventions. My research found a need for more transportation services for the homeless to keep medication appointments, along with education of Housing First for medical providers.

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Appendix A: Invitation Letter

Greetings, my name is Kyle Berkley. I am sending you this invitation to participate in my study that will explore how practitioners attempt to gain medical adherence with homeless clients who are mentally ill and HIV positive in the metropolitan area. In this study, I will conduct personal recorded interviews to identify themes of success and barriers towards clients in efforts to gain medical adherence.

You have been invited to participate in this interview based on your job function as a medical provider, your licensure, and the client population whom you serve. You, along with other participants, have been contacted by email and have been provided with a questionnaire to be answered for this study. The face-to-face interviews will be recorded and will take approximately an hour of your time. For the purpose of further exploration, and identifying key phrases, I will be taking notes. Please be sure to speak clearly. I may ask you to elaborate on a possible point you may make. Your name and information will be coded to protect your identity. This study will be used for educational purposes. Its goal is to add to the field of literature on medication adherence with vulnerable populations. This research study is not a representation of this agency. Please feel free to ask any questions or to provide feedback. Thank you for your participation. With your signature, you agree to participate in this study.

Appendix B: Interview Questions

RQ: What are the perceptions of providers who attempt to gain medical adherence from mentally ill and HIV positive homeless clients in the metropolitan area?

1. Let's begin with your background; what is your highest level of training or education?
2. In your own words, please tell me about your professional background, along with what licenses, training or degrees you may hold.
3. What is your job title and how would you describe your role at this agency?
4. In your own words, how has your education level or training impacted your engagement with clients?
5. If you can estimate, how many clients do you see with HIV and mental health challenges?
6. What has been your overall experience with medical adherence, which includes having clients adhering to an agreed upon treatment plan and taking their medication as prescribed, in this population (those with HIV and mental health problems)?
7. What do you think most influences medical adherence in this group of people?
8. What are some of the interventions you have tried to gain medical adherence?
9. What worked best with your interventions and how did you learn the approach?
10. What are some of the challenges you have faced trying to gain medical adherence?
11. What are some of the challenges you have encountered with HIV positive homeless clients diagnosed with mental illness?

12. What changes would you recommend that would increase medical adherence with clients?
13. What are the differences in adherence with clients who live in shelters or those who live in different locations, such as on the street or affordable housing?
14. How does an HIV positive client's lack of available resources (such as money, housing, insurance or social support) impact interventions used?
15. If you could change anything about the engagement with your homeless clients, that are HIV positive and mentally ill to gain adherence, what would it be?
16. In your own words, how would you describe Housing First?
17. How does Housing First, or Harm Reduction interventions impact as a practitioner?
18. Is there anything else about your experiences as a medical provider with this population you would like to tell me?

Appendix C: Social Media Post

Greetings, my name is Kyle Berkley, and I'm currently a Ph.D. candidate at Walden University. I am looking for registered nurses, nurse practitioners, case managers, mental health therapists, primary care physicians, and addictions counselors, that work at metropolitan area outpatient medical centers to participate in my research study. The research study will explore the perceptions of medical providers that engage with homeless clients diagnosed with HIV and mental illness. If you are interested in participating in this study, please email me. Thank you.